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November 17, 1999

TO: All Interested Parties

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SUBJECT: **California Offshore Oil and Gas Leasing and Development Status Report**

Attached is the *California Offshore Oil and Gas Leasing and Development Status Report* (dated May 25, 1999) that was prepared for the California Secretary for Resources. Subsequent to the preparation of that report, the U.S. Department of the Interior, on August 13, 1999, declined to extend the lease terms of four of the 40 undeveloped federal leases (leases 0420, 0424, 0429 in the Santa Maria Unit and lease 0462 in the Gato Canyon Unit). All four of those leases expired August 16, 1999. Accordingly, there are currently 36 undeveloped federal oil and gas leased areas offshore of California.

Coastal Commission staff is currently revising the *California Offshore Oil and Gas Leasing and Development Status Report* to reflect these changes. Once those changes are made, we will issue an amended report. In the meantime, please note the expiration of those four leases as you read the May 1999 version of the report.

**Tu 14d**

**CALIFORNIA OFFSHORE  
OIL AND GAS LEASING  
AND DEVELOPMENT  
STATUS REPORT**

PREPARED BY  
CALIFORNIA COASTAL COMMISSION STAFF  
AND  
STATE LANDS COMMISSION STAFF  
IN CONSULTATION WITH THE  
MINERALS MANAGEMENT SERVICE  
AT THE DIRECTION OF THE  
CALIFORNIA COASTAL COMMISSION  
FOR THE  
CALIFORNIA SECRETARY FOR RESOURCES

May 25, 1999

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Attachment 2:	March 17, 1999, letter to Ms. Sara Wan, Chair, California Coastal Commission from Mary D. Nichols, Secretary for Resources
Attachment 3:	May 14, 1999, letter to Honorable Barbara Boxer, United States Senate from Thomas R. Kitsos, Minerals Management Service
Attachment 4:	May 14, 1999, letter to Honorable Lois Capps, House of Representatives from Thomas R. Kitsos, Minerals Management Service
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## EXECUTIVE SUMMARY

### CONTENTS AND PURPOSE OF THIS STAFF REPORT

The California Secretary for Resources, Mary D. Nichols, in letters dated January 14, 1999 and March 17, 1999, (Attachments 1 and 2), requested that the Coastal Commission staff and the State Lands Commission staff jointly prepare a report on issues relating to offshore oil and gas development along the California coast in state and federal waters. This report is prepared at the direction of the California Coastal Commission in response to Secretary Nichols' questions and as a briefing document for the Commission and the public. The report was prepared by the staffs of the California Coastal Commission and the California State Lands Commission in consultation with the Minerals Management Service (the federal agency in the Department of the Interior responsible for offshore oil and gas activities). It has not been reviewed by either the Coastal Commission or the State Lands Commission.

The report will be presented to the Secretary for Resources, the California Coastal Commission, and the State Lands Commission for information purposes and will be discussed at the Coastal Commission's June 1999 meeting in Santa Barbara. **The Coastal Commission will not be taking action on the report, but may direct further work by the Coastal Commission staff.**

The Coastal Commission staff scheduled review of this report for the June Commission meeting because key information on the 40 undeveloped Outer Continental Shelf (OCS) tract lands was due to be submitted to the Minerals Management Service (MMS) by May 15, 1999. This information has now been received by the MMS and is being reviewed for completeness. Once released by the MMS, the information will give the Secretary for Resources, the Coastal Commission, the State Lands Commission, and the public a more comprehensive picture of proposed further activities on the 40 undeveloped California OCS tracts.

This executive summary highlights the answers to the Secretary's questions and the attached report provides a more detailed discussion with supporting maps and charts.

## RESPONSE TO QUESTIONS POSED BY THE SECRETARY FOR RESOURCES

***Q. What is the status of all current moratoria on oil and gas leasing in both state and federal waters off the California coast? What actions, if any, need to and can be taken to make permanent the moratoria on such leasing activities?***

### **Federal Moratoria for New OCS Lease Activities**

Except for the limited geographic area of waters within National Marine Sanctuaries, no portion of the federal OCS has a permanent moratorium on oil and gas leasing and development. However, temporary moratoria have been in place in select areas of the OCS for the past 17 years. Presently, a one-year congressional OCS moratorium contained in the FY 1999 Department of the Interior Appropriations bill precludes the expenditure of funds for new federal offshore oil and gas leasing in specific coastal areas until October 1, 1999. This congressional OCS moratorium includes a prohibition on new leasing along the entire U.S. West Coast.

In addition to the congressional moratoria, the Bush and Clinton administrations also issued directives under the OCS Lands Act to restrict the leasing of new offshore areas. In 1990, President George Bush directed that all areas protected by congressional moratoria be deferred for leasing consideration until after the year 2002. This deferral included the federal OCS offshore of California. In June 1998, President Bill Clinton also issued a directive under the OCS Lands Act that prevents the leasing of any area currently under moratorium for oil and gas exploration and development prior to June 30, 2012. These OCS “presidential deferrals” can be reversed by subsequent administrations.

The existing congressional moratoria and presidential leasing deferrals ~~do not~~ restrict the development of already leased areas.

The only way to make the OCS leasing moratoria permanent is for Congress to pass a statute specifying which areas on the OCS are permanently not available for leasing and for the President to sign it into law.

### **State Moratoria**

Commencing in the 1920's, the State Legislature placed most of the California coast off limits to oil and gas leasing and development through a variety of oil and gas “sanctuary” statutes. However, large areas of the coast remained unprotected, including much of Mendocino and Humboldt counties and parts of Los Angeles, Ventura, and Santa Barbara counties. In order to remedy this situation the State

Lands Commission, on October 26, 1988 and December 6, 1989, filled in the remaining gaps in the sanctuary statutes and administratively foreclosed the possibility of new oil and gas leasing in state coastal waters. This administrative sanctuary was later incorporated by the legislature in its comprehensive ban on new oil and gas leasing, through the California Coastal Sanctuary Act of 1994.

Pursuant to this statute, all state coastal waters, except those under lease on January 1, 1995, are permanently included in the sanctuary. The State Lands Commission is prohibited from issuing new oil and gas leases unless it determines that oil and gas are being drained by means of wells upon federal lands and the lease is in the best interest of the state, or the President has found a severe energy supply interruption and the Governor and the legislature act to allow further development of the state's offshore oil and gas resources.

A drilling moratorium imposed by the State Lands Commission in 1969 following the well blowout in federal waters offshore Santa Barbara has been lifted on 35 of the existing active leases, with the remaining 7 leases still subject to the moratorium. Of these seven, five have never been developed (see Appendix 2, Status of Active State Offshore Leases). In order to make the drilling moratorium permanent on these leases they would have to be reacquired by the state.

***Q. What is the status of all undeveloped offshore tracts in state and federal waters off the California coast that have been leased? Please include the following key information:***

- The date of lease issuance;***
- The date of lease termination;***
- Any major lease stipulations such as “due diligence” requirements applicable to development; and***
- The status of activity (i.e., has exploration occurred and have any governmental approvals been acted upon).***

**NOTE: Appendix 1: Federal Undeveloped Lease Table and Appendix 2: Status of Active State Lease Table provide all the specific answers to the above question.**

### **The Status of the Federal Undeveloped Lease Tracts**

There are 40 existing undeveloped federal OCS leases offshore California. These 40 leases were leased between 1968 and 1984. These 40 tracts are in the Santa Barbara Channel or the Santa Maria Basin (See Maps 1 to 3).

The 40 undeveloped leases are organized into nine separate “units” and one lease not within a unit. Often a single oil and gas reservoir underlies offshore tracts

leased by two or more separate lessees. A unit provides for the minimum number of leases that will allow the lessees to minimize the number of platforms, facility installations, and wells necessary for efficient exploration, development, and production.

Rather than work with multiple EPs on each unit, for example, a single EP for each unit can address the required delineation wells (for those units with a discovery) or exploration wells (for the one unit that has yet to be drilled).

All 40 leases have a primary lease term of five years. The Minerals Management Service has granted a series of lease suspensions (i.e., extensions) upon lessees' requests or a directed suspension by the MMS Regional Director (These suspensions are discussed in detail in Section 6.2 of this report).

The current directed suspension imposed by the MMS (to allow time for the preparation of the California Offshore Oil and Gas Resources Study (COOGER)) (See Section 6.1) on these leases expires on June 30, 1999. The MMS advised the lessees that, if they wish to maintain the leases, they need to provide by May 15, 1999, written requests for suspension to take one of the following steps:

1. Revise previously approved Exploration Plans (EPs) under MMS regulations at 30 CFR 250.203,
2. Propose new EPs under 30 CFR 250.203, or
3. Propose Development and Production Plans (DPPs) under 30 CFR 250.204.

The requests for suspensions must provide a proposed schedule of activities to include a timetable for submission of EPs or DPPs. The MMS will review these proposed schedules and justifications to evaluate whether to grant the suspensions and, if so, for what period of time.

MMS received these written requests in mid-May and is currently reviewing the lessees' proposals for completeness. MMS has committed to provide a summary of the suspension requests to the State of California, the California Coastal Commission, the three adjacent counties, and interested members of the California congressional delegation as soon as MMS has reviewed the submittals for completeness. MMS is also prepared to provide copies of nonproprietary information on request.



## **Federal Regulations Governing Requests for Suspensions**

The MMS has stated that it will use the criteria in 30 CFR 250.110 and determine whether a Suspension of Production (SOP) or Suspension of Operation (SOO) is appropriate in each case.

When MMS receives a request for a suspension, its options are to either approve or deny the request based upon the criteria in the MMS regulations.

In reviewing any request for suspensions, the MMS has stated that the agency will apply the criteria in 30 CFR 250.110, and the following guidelines derived from the regulations:

- ⤴ Requests for an SOP must include a well capable of producing in paying quantities.
- ⤴ Requests for an SOP must include a schedule leading to production on the lease.
- ⤴ The schedule for an SOP must provide for proper and prudent development and must not include any extra time to hold a lease for speculative purposes.

SOPs apply only to leases in units that include a portion of the reservoir proposed for production. Requests for an SOO do not require a producible well but would be reviewed on the more restrictive criteria for SOO in 30 CFR 250.110 (see Attachment 6). A lease suspension extends the term of a lease for the period during which the suspension is in effect (30 CFR 250.110 and 256.73).

**Q. *Regarding the 40 existing undeveloped OCS leases off the coast:***

- ***How many of these leases have been reviewed by the Coastal Commission and what was the nature of the review?***
- ***Is there any information available to indicate whether oil and gas resources within these tracts could be developed from existing production platforms?***
- ***What approvals from state and federal agencies are needed before oil exploration, development, and transportation activities can proceed?***
- ***What standards or criteria for review would be applicable to the Coastal Commission's review of any proposed exploration and/or development plans?***

## **The California Coastal Act of 1976**

California voters passed the citizen initiated Proposition 20 in 1972, which mandated the preparation of a coastal management plan by a newly created

temporary California Coastal Zone Conservation Commission. In 1975, the Commission adopted the California Coastal Plan, which became the policy framework for the California Coastal Act of 1976 (“Coastal Act”) that made permanent the California Coastal Commission (*California Public Resources Code, Division 20*).

The Coastal Commission has direct permit authority over offshore oil and gas development out to three nautical miles (in state waters). The Commission’s standard of review of such development is Chapter 3 of the Coastal Act. Chapter 3, Article 7 contains policies that specifically address oil and gas development. For example, section 30260 encourages coastal-dependent industrial facilities to locate or expand within existing sites where feasible. Section 30262 sets standards for oil and gas development addressing (a) geological conditions, (b) consolidation of facilities, (c) use of subsea wells to avoid visual impacts associated with production platforms and islands, (d) interference with vessel traffic, (e) subsidence, and (f) water quality impacts.

In addition to policies specifically addressing oil and gas development, Chapter 3 includes other policies relating to oil spills, water and air quality, safety, commercial and recreational fishing, marine and land resources, public access and recreation resources that must be considered in the review of such development proposals.

The Coastal Act also contains an “override” provision (*Coastal Act § 30260*) that allows approval of coastal-dependent industrial facilities that are not otherwise consistent with one or more policies of the Coastal Act as long as (a) alternative locations are infeasible or more environmentally damaging, (b) to deny the project would adversely affect the public’s welfare, and (c) adverse environmental effects are mitigated to the maximum extent feasible.

### **Coastal Zone Management Act**

In 1972, Congress passed the federal Coastal Zone Management Act (“CZMA”) to encourage effective state management of coastal zone resources, including but not limited to oil and gas activities, and associated environmental impacts in and adjacent to the marginal sea (see *16 U.S.C. 1451 et seq.*). The CZMA provides federal funding to support state coastal zone management programs that met certain policy objectives (e.g., protection of the marine environment and wetlands, and orderly development of offshore energy resources).

The CZMA also established a unique federal–state coordinated regulatory process known as “consistency review,” which grants coastal states that elect to participate in the CZMA program and whose coastal programs have been federally approved the ability to regulate federal activities that affect their coastal zones — including

OCS oil and gas development activities. California sought certification of the Coastal Management Program established pursuant to the Coastal Act of 1976 under the CZMA. The National Oceanic and Atmospheric Administration (“NOAA”) certified the California Coastal Management Plan (“CCMP”) in 1978, giving the state consistency review authority over federal activities that affect the California coastal zone.

Section 307(c)(3)(B) of the CZMA, as amended in 1976, provides that plans for the exploration and development of the OCS would have to be consistent with the federally approved coastal management programs of affected states if those oil and gas plans were to be permitted. The standard of review for federal consistency is the CCMP, which consists principally of the policies of Chapter 3 of the Coastal Act.<sup>1</sup> In addition to the Coastal Act, the CCMP also incorporates the policies of the federal Clean Air and Clean Water Acts and any state standards authorized under those acts (e.g., the California Ocean Plan).

### **Summary of Coastal Commission Regulatory Review of the 40 Existing Federal Leases**

Between 1981–85, leaseholders proposed plans for the exploration of 35 of the 40 undeveloped federal tracts. The Coastal Commission concurred with federal consistency certifications for exploration plans on 34 of the 40 leases. The Coastal Commission objected to the exploration plan (“EP”) for Lease 414. No EPs have been submitted for Leases 210, 429, 462, 464 and 527.

To date:

- ▲ A total of 139 exploratory wells on 34 leases were granted Coastal Commission federal consistency certifications.
- ▲ 39 wells have been drilled on 23 of the 34 leases with Coastal Commission approved EPs.
- ▲ 100 wells with Coastal Commission approvals have not been drilled.
- ▲ Discoveries have occurred on 18 leases.
- ▲ 47 approved well locations remain on leases for which no discoveries have been made.<sup>2</sup>

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<sup>1</sup> A local government’s certified LCP can provide guidance in applying Chapter 3 policies of the Coastal Act if the certified LCP has been incorporated into the CCMP. If the LCP has not been incorporated into the CCMP, it cannot be used to guide the Coastal Commission’s federal consistency decisions, but may be used as background information.

<sup>2</sup> Leases 319, 402, 420, 421, 425, 426, 430, 431, 432, 433, 445, 453, 499, and 500.

- ✦ In 1987 the Coastal Commission also approved one development and production plan (“DPP”) for Lease 409—Platform Julius. Platform Julius was not installed (See *Appendix 1*).

### **Potential Development of Federal Leases from Existing Platforms**

The MMS estimates that of the 40 undeveloped leases 14 could potentially be developed from existing platforms. Approximately four new platforms may be necessary to develop the remaining 26 leases. However, future advances in drilling technology may allow development of these leases with fewer platforms.

### **Approvals Necessary to Develop Oil and Gas Leases**

The Coastal Zone Management Act requires that all applicants for MMS approval of a plan for development of or production from an area leased under the OCS Lands Act shall provide to the Coastal Commission a “consistency certification” that the proposed activity complies with and will be conducted in a manner consistent with policies and standards contained in the CCMP(16 U.S.C. § 1456(c)(3)(B)). In addition, other federal, state and local approvals will be required depending on the configuration of the development plan. Examples of these are:

- ✦ U.S. Army Corps of Engineers
- ✦ U.S. Coast Guard
- ✦ U.S. Environmental Protection Agency
- ✦ U.S. Fish and Wildlife Service
- ✦ U.S. National Marine Fisheries Service
- ✦ California State Lands Commission
- ✦ Local Air Pollution Control District
- ✦ Local government in the county where the oil is being brought ashore.

Since 1973 approvals from a variety of state and local governmental agencies have facilitated development on **state** leases. To develop the five remaining undeveloped state leases, or expand existing developed leases, would require similar approvals from agencies such as the following:

- ✦ California State Lands Commission
- ✦ Coastal Commission
- ✦ Department of Fish and Game
- ✦ Office of Oil Spill Prevention and Response

- ✦ Department of Oil, Gas and Geothermal Resources
- ✦ Regional Water Quality Control Board
- ✦ Local Air Pollution Control District
- ✦ Local government
- ✦ US Army Corps of Engineers if a new platform is placed in state waters
- ✦ Minerals Management Service if a federal platform is used as a drill site

**Q. *With respect to any OCS lease tract on which the Coastal Commission has taken an action, is there a factual basis, (i.e., changed circumstances, new information) for the Coastal Commission to ask for a new review?***

### **Newly Proposed Activities**

The CZMA provides that OCS exploration plans (EPs) or development and production plans (DPPs) shall be consistent with the federally approved coastal management programs of affected states in order for those oil and gas plans to be approved. Accordingly, any newly proposed EP or DPP is subject to Coastal Commission federal consistency review. Lease 409 could potentially be developed under the previously approved DPP. The remaining 39 leases will need MMS approval and Coastal Commission consistency review before development can occur. The federal consistency review process is discussed in greater detail in Section 2.9 of this report.

### **Renewals or Major Amendments for Activities not Previously Reviewed**

The regulations that implement the CZMA provide that renewals or major amendments to federal permits or licenses for activities not previously reviewed by the state that affect the coastal zone are subject to federal consistency review (15 *CFR* §930.51(b)(1)).

### **Previously Reviewed Activities**

The Coastal Commission retains federal consistency review over any major amendments of the 35 OCS EPs and the one DPP for which the Coastal Commission has granted consistency certification. However, the CZMA's regulations in 15 *CFR* §§ 930.51 and 930.71 limit consistency of activities previously reviewed by the State agency to modifications that will cause coastal zone effects substantially different than those originally reviewed.

In addition, 15 *CFR* § 930.86 authorizes the Coastal Commission to monitor previously reviewed activities. **The Commission may request from the MMS**

**an additional consistency review if it determines that an MMS-approved activity either is not being conducted in accordance with an approved EP or DPP, or is having coastal zone effects substantially different than described in the original review.**

The Coastal Commission may appeal to the Secretary of Commerce a refusal by the MMS to grant a request for such an additional review. In either case, the Coastal Commission or its staff must determine that the activities are causing coastal zone effects **substantially different** than those originally reviewed by the Coastal Commission in order to have an opportunity for a new consistency review.

In a May 14, 1999, letter to Senator Barbara Boxer, Thomas Kitsos, Acting MMS Director acknowledged that “the MMS believes that the revised EPs may well constitute significant changes and will likely require a new CZMA consistency review. The process and criteria for CZMA consistency are specified by the State and by the Department of Commerce.”

### **Re-Leasing**

The Coastal Zone Reauthorization Act of 1990 clarified that OCS lease sales are subject to the federal consistency review process. Therefore, the proposed re-leasing of any previously expired OCS leases would trigger Coastal Commission federal consistency review. If any of the 40 undeveloped OCS leases were to expire, their re-leasing would be subject to Coastal Commission review.

## **POTENTIAL NEXT STEPS FOR THE COASTAL COMMISSION**

The Coastal Commission has regulatory responsibilities under the California Coastal Act and the federal Coastal Zone Management Act that it must adhere to in further actions regarding the 40 non-producing OCS leases. A key element of the Commission’s regulatory responsibility is to review each proposed oil and gas development or activity on a case-by-case basis. The Coastal Commission staff will take the following next steps to continue the Coastal Commission’s involvement in reviewing potential further exploration and development on the 40 non-producing OCS leases:

### **1. Review Requests for Suspensions**

The Coastal Commission staff will work with MMS to actively review (in consultation with other interested parties) the requests for suspensions and

respond to the MMS on whether the lessees' suspension proposals have appropriate environmental analysis and safeguards built into the schedules of activities prior to MMS' June 30, 1999 action.

## **2. Request that the MMS Notify the Commission of All Changes Proposed to Past Consistency Approvals**

Review all suspension requests to determine if there is adequate information currently available to determine if a new federal consistency certification for the exploration plans and other activities specified in the suspension request is appropriate. Staff will work with MMS to try to come to agreement on the consistency review process for all activities specified in any suspension granted by the MMS.

## **3. Hold a Coastal Commission Workshop in Late Summer or Fall 1999**

The Coastal Commission staff proposes to schedule a follow-up Commission workshop to discuss the Coastal Act issues that the activities proposed by the lessees of the 40 non-producing leases raise. A workshop will allow all parties to discuss some of the critical Coastal Act issues including but not limited to:

- ▲ Oil spill prevention and clean-up
- ▲ Marine resources
- ▲ Air quality
- ▲ Onshore pipeline transportation of oil to refinery destinations
- ▲ Visual impacts
- ▲ Policies of the LCPs of affected local governments
- ▲ Commercial and sport fishing
- ▲ Consolidation of facilities
- ▲ Protected species

Identification and discussion of these issues in a public forum prior to submission of individual consistency certifications would be valuable to all parties.

## **4. Determine for Each Lease Whether Additional Consistency Review will be required**

It is necessary to conduct a case-by-case review of past Coastal Commission consistency actions and compare that action with the lessees' proposed

activities and schedule to determine if a new consistency review will be required.

**5. Conduct Federal Consistency Review of All New Proposed Seismic Surveys**

The Coastal Commission staff will process all proposals for high energy seismic surveys pursuant to the agency review process agreed to by the High Energy Seismic Survey (“HESS”) Team. Since 1996, the Coastal Commission and State Lands Commission have participated in an MMS-sponsored HESS Team to develop a recommendation for improving the process that regulatory agencies follow in reviewing high energy seismic surveys. A seismic survey proposed in federal waters will require federal consistency review.

**6. Conduct Federal Consistency Review of All Proposed Exploration Plans**

As they are submitted over the next few years, the Coastal Commission staff will review and schedule public hearings for Commission review and action on each consistency certification for exploration plans. Commission staff will work closely with the MMS, local governments, and other interested parties to share information as it becomes available about proposed activities.

**7. Conduct Federal Consistency Review of All Proposed Development and Production Plans**

As they are submitted over the next few years, the Coastal Commission staff will review and schedule public hearings for Commission review and action on each consistency certification for development and production plans. Commission staff will work closely with the MMS, local governments, and other interested parties to share information as it becomes available about proposed activities.



## 1.0 INTRODUCTION

This report was prepared at the direction of the Coastal Commission in response to the Secretary for Resources' request that Coastal Commission and State Lands Commission staffs jointly provide information on the status and future of California's offshore oil and gas leasing and development (Attachments 1 and 2).<sup>1</sup> The report also provides a briefing to Commissioners and the public.

The Secretary for Resources' specific questions are:

1. What is the status of all current moratoria on oil and gas leasing in both state and federal waters off the California coast? What actions, if any, need to and can be taken to make permanent the moratoria on such leasing activities?
2. What is the status of all undeveloped offshore tracts in state and federal waters off the California coast that have been leased? Please include the following key information:
  - The date of lease issuance;
  - The date of lease termination;
  - Any major lease stipulations such as "due diligence" requirements applicable to development; and
  - The status of activity (i.e., has exploration occurred and have any governmental approvals been acted upon).
3. Regarding the 40 existing undeveloped OCS leases off the coast:
  - How many of these leases have been reviewed by the [Coastal] Commission and what was the nature of the review?
  - Is there any information available to indicate whether oil and gas resources within these tracts could be developed from existing production platforms?
  - What approvals from state and federal agencies are needed before oil exploration, development, and transportation activities can proceed?
  - What standards or criteria for review would be applicable to the [Coastal] Commission's review of any proposed exploration and/or development plans?
4. With respect to any OCS lease tract on which the [Coastal] Commission has taken an action, is there a factual basis, (i.e., changed circumstances, new information) for the [Coastal] Commission to ask for a new review?

<sup>1</sup> (1) Letter from Mary Nichols, Secretary for Resources, to Rusty Areias, former Coastal Commission Chair, January 14, 1999; (2) Letter from Mary Nichols to Sara Wan, Coastal Commission Chair, March 17, 1999.

In addition, we have provided a brief history of California offshore oil and gas leasing, exploration and development.

This report was prepared by Coastal Commission and State Lands Commission staff in consultation with and with data and information provided by the federal Minerals Management Service.

## **2.0 HISTORY OF CALIFORNIA OFFSHORE OIL AND GAS DEVELOPMENT/LEGISLATION**

### **2.1 Initial Development**

Significant California oil development began onshore in the 1860's and expanded rapidly through the turn of the century. The first "offshore" development began from wooden piers extending out from a developed onshore oil field in Santa Barbara County. This early coastal oil development was originally "regulated" only by the private individuals and companies that owned property along the coast, and suffered from wasteful and polluting drilling practices. Furthermore, onshore and pier development was rapidly draining the oil reservoirs that underlay the submerged lands of the "marginal sea"—the three-mile wide band of ocean area adjacent to the coast traditionally understood to be the property of the "sovereign" coastal states.

The first oil well was drilled into the California tidelands at Summerland, Santa Barbara County in 1896. Access leases were acquired from the littoral landowners, and by 1906 approximately 412 wells had been drilled along the beach and from wooden piers extending out into the tidelands. At that time there were no state laws governing the extraction of oil and gas from state-owned lands.

The State of California first responded to this coastal oil development in 1915 when the legislature created the Division of Oil and Gas—now the Division of Oil, Gas, and Geothermal Resources ("DOGGR")—as a branch of the State Mining Bureau to encourage the maximum recovery of oil and gas resources and to prevent wasteful drilling and production practices.<sup>2</sup>

### **2.2 Tidelands Leasing Act of 1921**

The California legislature passed a statute in 1921 that asserted the state's sovereign authority over all minerals on state lands including the marginal sea (*Chapter 303, Statutes of 1921*). This law allowed the California State Surveyor General to issue prospecting permits and oil development leases with a 5% royalty provision for state lands in coastal waters. It also

<sup>2</sup> The DOGGR is now an independent regulatory agency, in what is now the Department of Conservation, to oversee the continually expanding development of California's oil fields (see *California Public Resources Code, section 3000 et seq.* for the DOGGR's statutory authority and relevant historical citations).

prohibited offshore exploration on lands fronting on municipalities and extending one mile on either side, to assure that any oil resources would be saved for the state and/or municipalities. Under this statute, offshore development commenced at Rincon in Ventura County, at Ellwood in Santa Barbara County and continued at Summerland in Santa Barbara County. All drilling and production operations under this series of leases were conducted from piers. Several years later the legislature also passed the Oil Pollution Act of 1924, to prohibit oil discharges into the waters of the marginal sea.

Adequate supervision of offshore operations was not provided for in the 1921 Act, and ensuing developments served to foster public concern and resentment over the appearance and use of the coastline. The Surveyor General, administrator of the 1921 Act, deferred the issuance of several hundred tideland prospecting permits between 1926 and 1928 as a measure to protect the littoral landowners from obstruction by drilling structures. Litigation followed to force issuance of the permits, and the resulting Supreme Court decision, *Boone v. Kingsbury* 206 Cal. 148 (1928), required the Surveyor General to issue permits to the first qualified applicant for tide and submerged lands, excluding lands around municipalities.

### **2.3 State Lands Act of 1938**

Notwithstanding the state's new regulatory presence in the oil development process, the legislature closed its coastal waters entirely to new offshore oil and gas development in 1929 because of continuing pollution and depletion of the oil resources under state waters (*Chapter 536, Statutes of 1929*). Nevertheless, the drainage of the state's oil resources from pre-existing onshore wells continued. In the City of Huntington Beach, Orange County, town-lot drilling was freely permitted immediately adjacent to the tidelands, and in 1932 a trespass well was directionally drilled from an onshore surface location in Huntington Beach to a bottom-hole location offshore. The state, in 1934, after it was determined that numerous wells had been drilled from upland locations into the tidelands fronting Huntington Beach, entered into leases with the operators of the trespass wells in compromise of litigation that had been brought against the trespass drillers.

The need for a more comprehensive law governing offshore oil and gas development to protect tide and submerged lands against drainage from onshore drilling became increasing apparent, and on June 11, 1938, the State Lands Act became effective (*Stats. 1938, Ex. Sess, c.5, p. 38, sec 131*). This act created the State Lands Commission and assigned it jurisdiction over all state-owned tide and submerged lands and administrative control over any remaining state interest in granted tide and submerged lands. Another of the more important provisions of the 1938 Act restricted the leasing of tidelands to those lands that were being drained of oil or that were under threat of being drained by wells on adjacent lands not owned by the state.

## **2.4 Establishment of Federal Jurisdiction**

As the new technology for developing offshore oil resources in increasingly deeper waters became available, a jurisdictional dispute concerning the ownership of these valuable resources developed between the coastal states and the U.S. government, which asserted its ownership over the marginal sea as the ultimate Constitutional sovereign. This dispute was resolved in 1953 by two Congressional statutes that clarified federal and state rights and responsibilities for the “continental shelf” (the submerged lands extending from the coastline to the edge of the continental slope): The Submerged Lands Act of 1953 and the Outer Continental Shelf Lands Act of 1953.

The Submerged Lands Act of 1953 (*43 U.S.C. sec. 1301 et seq.*) affirmed the coastal states’ assertion of ownership of the submerged lands and resources within a three mile belt seaward of the line of low tide. The Outer Continental Shelf Lands Act of 1953 (“OCSLA”) established that the submerged lands and resources of the outer continental shelf (“OCS”) or beyond three miles, “appertained to the United States and [were] subject to its jurisdiction, control, and power of disposition” (*43 U.S.C. sec. 1331 et seq.*).

The OCSLA authorized the Secretary of the Interior to lease the federal offshore lands, or OCS, for mineral exploration, development and production and provided for very limited state involvement in the federal program. This act allowed the federal Bureau of Land Management (“BLM”) within the Department of the Interior (“DOI”) to lease the OCS for offshore oil and gas development. The post-lease exploration and development activities on the OCS were regulated by the U.S. Geological Survey (“USGS”), also within the Interior Department. For management purposes, the U.S. OCS was divided into four regions: Atlantic, Gulf of Mexico, Pacific, and Alaska.

The first federal OCS lease sale in the pacific region was held in 1963. The first Pacific OCS development platform (Phillips’ Platform “Hogan” in the Carpinteria field) was installed in 1967. Federal OCS lease tracts are generally 3 miles by 3 miles square, equivalent to 9 square miles.

## **2.5 Cunningham–Shell Act of 1955**

In 1955 the legislature passed the Cunningham–Shell Tidelands Act (Chapter 1724, Statutes of 1955), which in part was a compromise between the competing desires for uninhibited offshore development and for the preservation of esthetic and property values in highly developed coastal areas.

Under the 1938 Act, there was no exclusion of any state property from leasing provided that probable drainage of oil or gas from state lands was established. In contrast, the 1955 Act limited the application of its general leasing provisions to tide and submerged lands along the coast

between the northerly boundary of the City of Newport Beach in Orange County and a point six miles south of the town of Oceano in San Luis Obispo County (i.e. near known onshore productive oil and gas areas in Southern and Central California). Certain scenic lands along the coasts of Los Angeles, Santa Barbara and San Luis Obispo counties and the islands of San Clemente and Catalina were excluded from leasing under the provision except when subjected to probable drainage from wells drilled upon adjacent lands owned by others. The remainder of the coast was excluded from leasing unless threatened by drainage. In 1963 the area available for offshore oil and gas leasing was expanded to include additional tracts as far north as the Oregon border. The 1955 Act and the amendments in 1957 established the basic parameters under which most of the state's offshore leases were issued.

The 1938 Act had not authorized the use of artificially constructed drill sites other than "filled lands" for tideland development. However, drilling from onshore locations limited the exploration and development of the tidelands to a narrow belt adjacent to the uplands, and man-made islands, while extending this belt seaward were restricted to areas of shallow-water depths for economic reasons. It became apparent that offshore platforms would enable an operator to explore in deeper waters farther from shore and so the 1955 act provided for the location and construction of platforms or other fixed or floating structures from which drilling operations could be conducted.

Under the Cunningham–Shell Tidelands Act 10 stationary offshore drilling platforms; one production platform and two islands were installed on state-owned lands. This count does not include the four islands on the City of Long Beach granted lands. In March 1961, the first ocean-floor completion of a producing oil well in California was accomplished by Richfield Oil Corporation (now ARCO) at a location 4,550 feet offshore Rincon, Ventura County, in 55 feet of water. This method of development involves drilling with floating equipment and completing the well on the ocean floor. The wellhead and control equipment is placed on the ocean bottom and is connected to shore or an offshore production platform by submarine pipelines. Subsequently, 37 wells were completed on the ocean floor in the Santa Barbara Channel (all but one have now been abandoned).

## **2.6 1969 Well Blowout and Santa Barbara Oil Spill**

In 1969, the business of offshore oil and gas development in California was dramatically changed by a 10-day oil well "blowout"<sup>3</sup> offshore Santa Barbara, located in federal waters, which released an estimated 80,000 barrels of oil (42 gallons per barrel). The Santa Barbara spill is acknowledged as one of the events that led to the citizen's ballot initiative "Proposition 20" that brought about the Coastal Commission and the beginning of comprehensive coastal planning and regulation in California, and the environmental regulatory movement in the United States

<sup>3</sup> A blowout is an uncontrolled flow of well fluids from the well bore to the surface or into lowered pressured subsurface zones (underground blowout). The fluids can be water, gas, oil or other fluids.

including the passage of such federal legislation as the National Environmental Policy Act (“NEPA”) (*42 U.S.C. sec. 4321 et seq.*).

Following the 1969 oil spill, the State Lands Commission instituted several actions to prevent a similar spill in state waters. These were: (1) a directive to the staff to conduct a technical review of the spill, and to review all controls for operations on state lands; (2) cancellation of all existing geological survey (exploratory drilling) permits; and (3) institution of a moratorium on all new well drilling on state offshore lands.

After an extensive review, the State Lands Commission staff on December 11, 1973 reported its finding on the conditions of the State Lands Commission’s offshore drilling moratorium. Since December 1973, the State Lands Commission has lifted the offshore drilling moratorium on a lease by lease basis following a detailed review of the proposed development program and compliance with the California Environmental Quality Act (“CEQA”). The State Lands Commission on 35 existing leases has lifted the moratorium. Of the remaining seven leases, five have never been developed.

## **2.7 California Environmental Quality Act**

The California legislature passed the California Environmental Quality Act (“CEQA”) in 1970 (see *California Public Resources Code, sec. 21000 et seq.*), to require public agencies to prepare an Environmental Impact Report (“EIR”) whenever a proposed activity, including offshore oil activities sanctioned by the State Lands Commission and the Division of Oil, Gas and Geothermal Resources (“DOGGR”), might cause significant adverse effects on the environment. In 1971, the DOGGR’s regulatory mandate to oversee the conservation of state oil and gas production was amended to require the protection of the environment from offshore oil and gas activities.

## **2.8 The California Coastal Act of 1976**

California voters passed the citizen initiated Proposition 20 in 1972, which mandated the preparation of a coastal management plan by a newly created temporary California Coastal Zone Conservation Commission. In 1975, the Commission issued the California Coastal Plan, which became the policy framework for the passage of the California Coastal Act of 1976 (“Coastal Act”) and the establishment of the permanent California Coastal Commission (*California Public Resources Code, Division 20*).

The Coastal Commission has direct permit authority over offshore oil and gas development out to three nautical miles (in state waters). The Commission’s standard of review of such development is Chapter 3 of the Coastal Act. Chapter 3, Article 7 contains policies that specifically address oil and gas development. For example, section 30260 encourages coastal dependent industrial facilities to locate or expand within existing sites where feasible.

Section 30262 sets standards for oil and gas development addressing (a) geological conditions, (b) consolidation of facilities, (c) use of subsea wells to avoid visual impacts associated with production platforms and islands, (d) interference with vessel traffic, (e) subsidence, and (f) water quality impacts associated with produced water disposal.

In addition to policies specifically addressing oil and gas development, Chapter 3 includes other oil spill, water and air quality, safety, commercial and recreational fishing, marine and land resource, public access and recreation policies that must be considered in the review of such development proposals.

The Coastal Act also provides an “override” provision (*Coastal Act* § 30260) that allows for the approval of coastal-dependent industrial facilities that are not otherwise consistent with one or more policies of the Coastal Act as long as (a) alternative locations are infeasible or more environmentally damaging, (b) to deny the project would adversely affect the public’s welfare, and (c) adverse environmental effects are mitigated to the maximum extent feasible.

## **2.9 Coastal Zone Management Act**

In 1972, Congress passed the federal Coastal Zone Management Act (“CZMA”) to encourage effective state management of coastal development, including but not limited to oil and gas activities, and its associated environmental impacts in and adjacent to the marginal sea (see *16 U.S.C. 1451 et seq.*). The CZMA provided federal funding to support state coastal zone management programs that met certain policy objectives (e.g., protection of the marine environment and wetlands, and orderly development of offshore energy resources).

The CZMA also established a unique federal–state coordinated regulatory process known as “consistency review,” which grants coastal states which elect to participate in the CZMA program the ability to regulate federal activities that affect their coastal zones—including OCS oil and gas development activities. Accordingly, California pursued certification of the Coastal Act of 1976 as a “coastal zone management plan” sanctioned under the CZMA. The National Oceanic and Atmospheric Administration (“NOAA”) certified the California Coastal Management Plan (“CCMP”) in 1978, giving the state consistency review authority over federal activities that affect the California coastal zone. Section 307(c)(3)(B) of the CZMA, as amended in 1976, provides that OCS exploration plans (“EPs”) or development and production plans (“DPPs”) would have to be consistent with the federally approved coastal management programs of affected states if those oil and gas plans were to be permitted. The standard of review for federal consistency is the policies of Chapter 3 of the Coastal Act.<sup>4</sup> In addition to the Coastal

<sup>4</sup> A local government’s certified LCP can provide guidance in applying Chapter 3 policies of the Coastal Act if the certified LCP has been incorporated into the CCMP. If the LCP has not been incorporated into the CCMP, it cannot be used to guide the Coastal Commission’s federal consistency decisions, but may be used as background information.

Act, the CCMP also incorporates the policies of the federal Clean Air and Clean Water acts and any state standards authorized under those acts (e.g., the California Ocean Plan).

## **2.10 Amendment of the OCSLA and Agency Consolidation**

In addition to establishing the CZMA program, Congress amended the OCSLA in 1978 to require the DOI to better balance the need for expeditious development of the OCS (prompted by the energy crises of the 1970's) with the need to protect the offshore marine and coastal environment. Congress added new sections to the OCSLA that prescribe a process for developing leasing schedules in five-year increments through which coastal states, local governments affected by offshore development, and other interested parties provide to the DOI comments on its OCS leasing plans and sales.

The amendments to the OCSLA also specifically required the preparation of Environmental Impact Statements ("EIS") under NEPA at both the lease sale and the development planning phases of the OCS development process. In addition to these project-specific information requirements, Congress also formally established an Environmental Studies Program within the DOI. This studies program was designed to fund and/or conduct studies concerning the environmental and socioeconomic impacts of OCS oil and gas development. In 1981, these new OCS development responsibilities of the BLM and the USGS were consolidated in one federal agency within the DOI—the Minerals Management Service ("MMS"). The MMS is now responsible for OCS development planning, leasing, and exploration and development permitting, as well as the post-development phase regulation of production platforms.

## **3.0 OIL AND GAS LEASING**

### **3.1 The Federal OCS Leasing Program**

#### **3.1.1 Five-Year Leasing Plan**

The first phase of the offshore OCS oil and gas development program is the establishment of a broad leasing program and sale schedule. The 1978 amendments to the OCSLA require the Secretary of the Interior to prepare an oil and gas leasing program to guide leasing on the OCS over a five-year planning period. The MMS is the agency within the DOI that prepares the five-year lease program and offers individual lease sales.

The five-year lease program sets the stage for lease sales to be held in a given five-year period by specifying the size, timing, and location of each lease sale. Only areas included in the five-year lease program are available for leasing in the specified period. In selecting areas for leasing, the Secretary of the Interior is required to "obtain a balance between the potential for environmental



damage, the potential for discovery of oil and gas, and the potential for adverse impact on the coastal zone” (*OCSLA, Section 18(3)*).

The Secretary of the Interior must solicit and consider suggestions on a proposed five-year program from federal agencies, coastal states, local governments, the oil and gas industry, environmental organizations and other interested and affected parties. One of the main objectives is to elicit views and comments concerning the appropriate planning areas to include for leasing consideration. The entire planning process takes two years and includes several commenting opportunities. An Environmental Impact Statement is prepared for the “Proposed Program” pursuant to the NEPA. As mentioned above, the implementation of the five-year program has been controversial and each five-year plan promulgated by the Department of Interior since 1978 has resulted in litigation (see *State of California by and through Brown v. Watt*, 668 F.2d 1290 (1981); *State of California v. Watt*, 712 F.2d 584 (1983); and *Natural Resources Defense Council et al. v. Hodel*, 865 F.2d 288 (1988))

### **3.1.2 The 1992–1997 Five-Year Plan**

The five-year leasing program for 1992–1997 provided for no lease sales in the Pacific OCS Region, which includes California, Oregon and Washington. Previous drafts of the 1992–1997 program had included one Santa Barbara Channel/Santa Maria Basin lease sale to be held in 1996, which included 87 “blocks” (a block consists of up to 5,760 acres). The MMS, however, deleted the proposed lease sale in the Spring of 1992 after determining that the studies required to be completed prior to the lease sale would not be finished in time to consider a lease sale in the 1992–1997 five-year program.

The 1992–1997 five-year program described a new process for considering a lease sale within a given planning area, called the Area Evaluation and Decision Process (“AEDP”). The AEDP has three stages. In the “Information Acquisition and Evaluation” stage, the information base necessary for a decision on whether or not to proceed with leasing is acquired. The “Planning and Consultation” stage consists of an evaluation of the information gathered through the Information Base Review, solicitation of industry interest in the lease area, and consultation with all affected parties.

If, as a result of the first two stages, the MMS decides to proceed with the lease sale, the third stage, the “Analysis of Decision Options” is initiated. In this stage, the MMS prepares an EIS and a proposed Notice of Sale, which describes the proposed sale configuration, timing, and terms and conditions of the sale. The MMS solicits comments from affected parties on these documents and must also receive an Endangered Species Act “section 7” biological opinion from the U.S. Fish and Wildlife Service and NOAA regarding the effect of the proposed lease sale on endangered species. The Analysis of Decision Options phase is also the stage in which the MMS

will submit a consistency determination<sup>5</sup> to a state coastal management agency, in accordance with the 1990 Reauthorization of the CZMA.

### **3.1.3 The 1997–2002 Five-Year Plan**

In November 1996, after a lengthy process of consultation and analysis, Secretary of the Interior Bruce Babbitt approved the MMS's 1997–2002 Five-Year Program for natural gas and oil lease sales on the OCS. The program included 16 sales in seven areas of the OCS. No leasing was considered off the Atlantic or Pacific coasts.

### **3.1.4 The Individual Lease Sale Process**

Once a five-year lease program is finalized and adopted, the MMS begins the process through which individual lease sales are evaluated, refined, and eventually held for industry bidding. The leasing phase is a two-year process, structured essentially by the preparation of an EIS under the NEPA. Since offshore oil and gas development began in California in 1958, the federal government has conducted 10 California OCS lease sales (between 1963–1984). Note that a “block” becomes a “tract” upon leasing.

### **3.1.5 Coastal Commission Involvement in OCS Leasing**

Four of the ten OCS lease sales were conducted either prior to the establishment of the California Coastal Commission in 1972 or before the federal government extended federal consistency review authority to the Commission through its 1978 approval of the California Coastal Management Plan. [*Please refer to Table 1.*] Like the five-year planning process, federal consistency review of the other six OCS lease sales has been a touchstone for conflict because of the significant issues raised at this pre-exploration stage of the offshore oil development process.

For many years, California and other coastal states had a dispute with the federal government as to whether states with approved coastal management programs had federal review authority over lease sale activities. Although section 307(c)(3)(B) of the CZMA explicitly required that all federally-permitted or licensed oil and gas exploration, development and production projects be found consistent with the state's approved coastal management program, California and the federal government disagreed over whether or not section 307(c)(1) of the CZMA allows for state review of the leasing phase. This section provided that:

*[e]ach federal agency conducting or supporting activities directly affecting the coastal zone shall conduct or support those activities in a manner which is, to the maximum extent practicable, consistent with the approved state management programs.*

<sup>5</sup> A consistency determination is a statement and supporting documentation describing how the proposed federal action will be undertaken in a manner “consistent to the maximum extent practicable” with California's coastal management program.

Beginning in 1978, the Coastal Commission argued that OCS federal oil and gas leasing conducted by the DOI is an activity directly affecting the coastal zone and therefore requires federal consistency review. In statements to the DOI, the Coastal Commission maintained that since a lease sale decision sets the initial boundaries on the OCS where oil and gas development can and cannot take place, the lease sale process essentially constitutes a “subdivision of the OCS,” creating both the right to develop and the conditions under which the development can take place. Accordingly, the Coastal Commission argued that the selection of specific tracts, and the specification of stipulations pertaining to pipeline transportation and marine resource protection, in fact directly affects the coastal zone.

**Table 1. California Federal OCS Lease Sale Activity**

Lease Sale	Sale Date	Tracts Offered	Tracts Objected to by CCC	Tracts Leased	Tracts Leased with CCC Objection	Current Active Lease
P1*	5-14-63	129		57		0
P3*	12-15-66	1		1		1
P4*	2-06-68	110		71		26
35*	12-11-75	231		56		4
48	6-29-79	148	11	54	0	9
53	5-28-81	111	29	60	19	36
68	6-11-82	140	27	29	0	4
RS-2	8-05-82	27	0	10	0	2
73	11-30-83	137	137	8	8	0
80	10-17-84	657	657	23	23	1
<b>Totals</b>		<b>1,691</b>	<b>850</b>	<b>369</b>	<b>50</b>	<b>83</b>

\* Lease Sales P1, P3, and P4 were carried out prior to the establishment of the Coastal Commission in 1972. Lease Sale 35 was proposed prior to the Federal Government approving California’s Coastal Management Program in 1978 which gave California federal consistency review authority.

The DOI historically maintained, however, that OCS leasing activities were exempt from section 307(c)(1) because a lease sale constitutes no more than an “administrative paper transaction” that would not “directly affect” the coastal zone in a physical manner. The DOI interpreted “directly affect” to mean any of the following types of effects: (1) changes in land or water uses in the coastal zone; (2) limitations in the range of uses of coastal zone resources; and (3) changes in the quality of coastal resources. Unless one of the three effects is present, the DOI held that no direct effect on the coastal zone existed.

### 3.1.6 Lease Sale 53

The disagreement between the Coastal Commission and the federal government surfaced dramatically in 1981 during the Lease Sale 53 planning process. The initial proposal for Lease Sale 53 included leasing tracts in the northern California Eel River, Point Arena, Bodega, and Santa Cruz basins. The Coastal Commission had historically opposed any tract leasing north of the Santa Maria River due to, among many other reasons, the potential impacts to the threatened sea otter. The Coastal Commission thus requested deletion of the northern basin tracts during the early planning stages for proposed Lease Sale 53.

Although former DOI Secretary Cecil Andrus (of the Carter administration) agreed to delete the proposed tracts in the four northern California basins, James Watt, within two weeks of taking over the DOI for the newly-elected President Reagan, reinstated the four northern basins in a revised notice for Lease Sale 53. Under Secretary Watt, the DOI submitted a “negative determination” to the Coastal Commission stating that the sale activities would have no direct effect on California’s coastal zone.

### 3.1.7 Judicial Decisions on Lease Sale Consistency

Following the DOI’s submittal of the negative determination, the Coastal Commission sued the DOI, arguing that Lease Sale 53 would have a direct affect on the California coastal zone and that the DOI was, therefore, required to submit a “consistency determination,” not simply a negative determination. A consistency determination is a statement and supporting documentation describing how the proposed federal action will be undertaken in a manner consistent “to the maximum extent practicable” with California’s coastal management program. A consistency determination must include a detailed description of the project’s effects to the coastal zone and an evaluation of the project against the relevant standards of California’s coastal management program (*i.e.*, the Coastal Act). In 1981, the district court for the Central District of California found that not applying consistency review in circumstances where a federal agency initiates a series of events that would have consequences in the coastal zone would thwart the purpose of the CZMA (*State of California By and Through Brown v. Watt*, 520 F.Supp. 1359 (1981)). The court then concluded that lease sales did, in fact, cause such direct effects to the coastal zone.

In 1982, the U.S. Court of Appeals for the Ninth Circuit upheld the lower court’s finding that consistency review applied to lease sales (*State of California v. Watt*, 683 F.2d 1253 (1982)). The DOI appealed this decision and in 1984 the Supreme Court decided by a 5–4 vote that OCS lease sales were **not** subject to consistency review (*Interior v. California*, 104 S.Ct. 656 (1984)). The primary basis of the court’s decision, however, was not a finding that lease sales did not affect the coastal zone. The Supreme Court found that the DOI was not required to submit a consistency determination prior to a lease sale because Congress did not intend that section 307(c)(1) of the CZMA apply to OCS lease sales. Rather, the Court reasoned that section

307(c)(3)(B) of the CZMA, which requires the consistency review of federally-approved activities conducted by third parties, was the more pertinent section because lease sales were, in the Court's opinion, conducted by third parties, not the federal government. The Court went on to conclude that because Congress had included the exploration and development phases under section 307(c)(3)(B) but not lease sales, that consistency review was not required of lease sales.

### 3.1.8 Congressional Response

Following the Supreme Court's 1984 lease sale ruling, the coastal states and affected local governments redirected their efforts to Congress in the hope that it would amend the CZMA to clarify that OCS lease sales were subject to state consistency review authority. Although no amendment of the CZMA was forthcoming, Congress began in the 1980's to restrict the DOI from the leasing of coastal waters for new offshore drilling through an annual moratorium attached to DOI's appropriations bill. From fiscal year 1982 through fiscal year 1994 the acreage covered by these congressional moratoria grew from 0.7 million acres off California to a total of 460 million acres off the Pacific and Atlantic coasts, in the eastern Gulf of Mexico, and in the Bering Sea off Alaska. In addition, over the years the activities restricted by the moratoria have broadened to include the prohibition of pre-lease activities and exploration and development activities on existing leases. Congressional moratoria on leasing of select OCS areas has been in place for the past 17 years.

In addition to annual congressional leasing restrictions contained in appropriations bills, Congress clarified the "lease sale stage" consistency review question in the Coastal Zone Reauthorization Act of 1990. The reauthorization amended the federal consistency provisions to specify that all federal agency activities, including those outside the coastal zone, that **affect** coastal zone resources (the word "directly" was deleted from section 307(c)(1) of the CZMA) must be consistent, to the maximum extent practicable, with federally-approved state coastal programs. These amendments overruled the Supreme Court's *State of California v. Watt* decision by including OCS lease sales among the activities subject to consistency review.

Due to the consistency review controversy, Lease Sale 73, carried out after the U.S. Court of Appeals Lease Sale 53 decision and prior to the Supreme Court's 1984 decision, was the first and only lease sale to date where the DOI formally submitted a consistency determination to the Coastal Commission. The most recent federal California lease sale, Lease Sale 80 (1984), was conducted following the Supreme Court's 1984 decision but prior to the Coastal Zone Reauthorization Act of 1990. The Coastal Commission therefore did not exercise federal consistency review over this lease sale but instead provided an evaluation of the proposal in the form of "comments" submitted to the federal government.

### **3.1.9 Executive Branch Response**

In June of 1990, after a year of study by a presidential OCS Task Force, President George Bush issued an executive directive deferring new OCS leasing along most of the California coastline until after the year 2000. That directive provided that 87 tracts located in the Santa Barbara Channel and Santa Maria Basin areas could be leased after 1996, depending on the results of certain studies that had been recommended by the National Academy of Sciences as part of the OCS Task Force review. In its review, the National Academy of Sciences had identified information gaps in the areas of oceanographic and socioeconomic research related to OCS leasing. Some of the studies necessary to fill the information gaps have been initiated, but as mentioned earlier in this report, no leasing is being considered off the Pacific Coast in the 1997–2002 MMS five-year Program.

In June 1998, President Bill Clinton also issued a directive under the OCS Lands Act that prevents the leasing of any area currently under moratorium for oil and gas exploration and development prior to June 30, 2012.

### **3.1.10 Unitization of Federal OCS Leases**

Often a single oil and gas reservoir underlies offshore tracts leased by two or more separate owners. In such circumstances, there is a strong motivation for individual lessees to produce as much oil or gas as is possible from the reservoir to prevent the drainage of these resources by the other lessees. This incentive has often led to needless and costly drilling and the large-scale waste of oil and gas. “Unitization” is a conservation measure designed to avoid wasteful production practices. Through a “unit agreement,” all interest, ownership, and control of a prospective offshore oil and gas field is pooled under a single representative operator or company to develop the multiple offshore leases related to that field as if they constituted a single lease. Such unitization agreements maximize the recovery of oil and gas from a given reservoir, eliminate the drilling of unnecessary wells, reduce development and production costs, and protect the rights of operators, lessees, and royalty interest owners. Currently, there are 17 units on the California OCS (*See Table 2*).

## **3.2 The State Leasing Program**

### **3.2.1 State Leasing Activities**

Prior to the 1969 oil spill, the State Lands Commission had leased 153,597 acres of tide and submerged lands, comprising 58 leases, under a sequential leasing program. At that time bonus and royalty revenue received under these leases was \$190 million and \$633 million respectively. No other leases have been issued. State leases are varying sites depending on the adjacent shoreline geography.

The cumulative production and cumulative revenue from offshore development is 2.2 billion barrels and \$6.2 billion, respectively. The offshore oil and gas revenue has historically been distributed in accordance with Section 6217 of the Public Resources Code including funds for the benefit of the Water Fund and for the Capital Outlay Fund for Public Higher Education. In 1997, Section 6217 was amended providing for the primary beneficiary of the revenue to be the Resources Trust Fund (to preserve and protect the natural and recreational resources of the State and administered by the Department of Fish and Game).

**Table 2. Active Units in the Pacific OCS Region**

	<b>Name of Unit</b>	<b>Unit Operator</b>	<b>No. of Leases in Unit*</b>	<b>Producing</b>	<b>Leases in Unit</b>	<b>Platform(s)</b>
1	Beta	Aera	4	Yes	296, 300, 301, 306	Edith, Ellen, Elly, Eureka
2	Bonito	Nuevo	7	No	499, 500, 443, 445, 446, 449	
3	Cavern Point	Venoco	2	No	210, 527	
4	Gato Canyon	Samedan	3	No	460, 462, 464	
5	Lion Rock	Aera	6	No	396, 397, 402, 403, 408, 414	
6	Pitas Point	Nuevo	2	Yes	234, 346	Habitat
7	Point Arguello	Chevron	4	Yes	315, 316, 450, 451	Harvest, Hermosa, Hidalgo
8	Point Sal	Aera	4	No	415, 416, 421, 422	
9	Point Hueneme	Nuevo	2	Yes	202, 203	Gina
10	Point Pedernales	Torch	4	Yes	437, 438, 440, 441	Irene
11	Purisima Point	Aera	4	No	426, 427, 432, 435	
12	Rocky Point	Chevron	3	No	452, 453	
13	Santa Clara	Venoco	7	Yes	204, 205, 208, 209, 215, 216, 217	Gail, Gilda, Grace
14	Santa Maria	Aera	8	No	420, 424, 425, 429, 430, 431, 433, 434	
15	Santa Ynez	Exxon	16	Yes	180, 181, 182, 183, 187, 188, 189, 190, 191, 192, 193, 194, 195, 326, 329, 461	Hondo, Harmony, Heritage
16	Sword	Conoco	4	No	319, 320, 322, 323A	
17	Tranquillon Ridge	Torch	2	Yes	441, 444	Irene

\* No. of leases or portions of leases in each unit.

Nuevo is suboperator for 0296, Platform Edith

Nuevo is suboperator for 0215 and 0216, Platform Gilda

### **3.2.2 Coastal Commission Involvement in State Leasing**

Since the establishment of the Coastal Commission in 1972 there has been only one lease sale proposed in state waters. In 1983 the State Lands Commission approved the leasing of eight tracts of tide and submerged lands located between Point Conception and Point Arguello in Santa Barbara County encompassing some 40,000 acres. The lease sale did not take place. At that time the Coastal Commission and the State Lands Commission disagreed as to whether an offshore lease sale in state waters required a coastal development permit. The agencies approached this issue with a memorandum of understanding, which enabled the Coastal Commission and the State Lands Commission to review the lease sale on the merits.

Ultimately litigation filed by environmental groups blocked the lease sale. No further proposals for state leasing have been made since that time. The establishment of administrative oil and gas leasing sanctuaries by the State Lands Commission and the passage of the California Coastal Sanctuary Act of 1994 by the state legislature, appears to have made the jurisdictional issue moot.

## **4.0 FEDERAL AND STATE OCS LEASING AND DRILLING MORATORIA**

### **4.1 Federal Moratoria**

Except for the limited geographic area of waters within National Marine Sanctuaries, no portion of the federal OCS has a permanent moratorium on oil and gas leasing and development. However, temporary moratoria have been in place in select areas of the OCS for the past 17 years. Presently, a one-year congressional OCS moratorium contained in the FY 1999 Department of the Interior Appropriations bill precludes the expenditure of funds for new federal offshore oil and gas leasing in specific coastal areas until October 1, 1999. This congressional OCS moratorium includes a prohibition on new leasing along the entire U.S. West Coast.

In addition to the congressional moratoria, the Bush and Clinton administrations also issued directives under the OCS Lands Act to restrict the leasing of new offshore areas. In 1990, President George Bush directed that all areas protected by congressional moratoria be deferred for leasing consideration until after the year 2002. This deferral included the federal OCS offshore of California. In June 1998, President Bill Clinton also issued a directive under the OCS Lands Act that prevents the leasing of any area currently under moratorium for oil and gas exploration and development prior to June 30, 2012. These OCS “presidential deferrals” can be reversed by subsequent administrations.

The only way to make the federal leasing moratoria permanent is for Congress to pass a statute specifying which areas on the OCS are permanently not available for leasing and for the President to sign it into law.



Also, congressional moratoria and presidential leasing deferrals **do not** restrict the development of already leased areas.

## **4.2 State Moratoria**

### **4.2.1 Establishment of State Oil and Gas Leasing Sanctuary Zones**

Although the State Legislature had placed most of the California coast off limits to oil and gas leasing and development through a variety of oil and gas “sanctuary” statutes, large areas of the coast remained unprotected, including much of Mendocino and Humboldt counties and parts of Los Angeles, Ventura, and Santa Barbara counties. In order to remedy this situation the State Lands Commission, on October 26, 1988 and December 6, 1989, filled in the remaining gaps in the sanctuary statutes and administratively foreclosed the possibility of new oil and gas leasing in state coastal waters. This administrative sanctuary was later incorporated by the legislature in its comprehensive ban on new oil and gas leasing, through the California Coastal Sanctuary Act of 1994.

Pursuant to this statute, all state coastal waters, except those under lease on January 1, 1995, are permanently included in the sanctuary. The State Lands Commission is prohibited from issuing new oil and gas leases unless it determines that oil and gas are being drained by means of wells upon federal lands and the lease is in the best interest of the state, or the President has found a severe energy supply interruption and the Governor and the legislature act to allow further development of the state’s offshore oil and gas resources.

### **4.2.2 Drilling Moratoria**

The drilling moratorium imposed by the State Lands Commission in 1969 following the well blowout in federal waters offshore Santa Barbara has been lifted on 35 of the existing active leases, with the remaining seven leases still subject to the moratorium. Of these seven, five have never been developed (see Appendix 2, Status of Active State Offshore Leases). In order to make the drilling moratorium permanent on these leases they would have to be reacquired by the state.

## **5.0 STATUS OF PRODUCING LEASES**

### **5.1 Federal Waters**

Of the 83 tracts leased in the federal OCS offshore California, 43 are developed and are currently producing. There are 23 platforms located within eight of the 17 active federal OCS units (See Table 3). The remaining nine units are undeveloped at this time. (See Maps 1–4.)

**Table 3. Platforms in Federal Waters**

<b>Platform</b>	<b>Operator</b>	<b>Lease/Lease Sale</b>	<b>Field</b>	<b>Year Installed</b>	<b># of Well Slots</b>	<b>Water Depth (ft.)</b>
<i>Existing</i>						
Edith*	Nuevo	0296/35	Beta	1983	72	161
Ellen/Elly	Aera	0300/35	Beta	1980	80	265/255
Eureka*	Aera	0301/35	Beta	1984	60	700
Gail*	Venoco	0205/P4	Sockeye	1987	36	739
Gilda*	Nuevo	0216/P4	Santa Clara	1981	96	205
Gina*	Nuevo	0202/P4	Hueneme	1980	15	95
Grace*	Venoco	0217/P4	Santa Clara	1979	48	318
Hogan	Pacific Operators	0166/P3	Carpinteria Offshore	1967	66	154
Houchin	Pacific Operators	0166/P3	Carpinteria Offshore	1968	60	163
Henry	Nuevo	0240/P4	Carpinteria Offshore	1979	24	173
Habitat*	Nuevo	0234/P4	Pitas Point	1981	24	290
Hillhouse	Nuevo	0240/P4	Dos Cuadras	1969	60	190
A	Nuevo	0241/P4	Dos Cuadras	1968	57	188
B	Nuevo	0241/P4	Dos Cuadras	1968	63	190
C	Nuevo	0241/P4	Dos Cuadras	1977	60	192
Harmony*	Exxon	0190/P4	Hondo	1989	60	1,198
Harvest*	Chevron	0315/48	Point Arguello	1985	50	675
Heritage*	Exxon	0182/P4	Pescado	1989	60	1,075
Hondo	Exxon	0188/P4	Hondo	1976	28	842
Hermosa*	Chevron	0316/48	Point Arguello	1985	48	603
Hidalgo*	Chevron	0450/53	Point Arguello	1986	56	430
Irene*	Torch	0441/53	Point Pedernales	1985	72	242
<b><i>Approved (not installed)</i></b>						
Heather*	Exxon	0193/P4	Sacate	Not installed	28	620
Julius*	SFOGI	0409/53	San Miguel	Not installed	70	478
Independence*	Torch	0440/53	Point Pedernales	Not installed	60	285

\* Required Coastal Commission Approval

Current oil and gas production from the California OCS is 120,000 barrels (BBls) of crude oil per day and 210,000 thousand cubic feet (Mcf) of gas per day. The cumulative totals for oil and gas production from the California OCS as of September 1998 are 904 million BBls of oil and 1 billion Mcf of gas.

## 5.2 State Waters

Of the 42 total tracts leased in state waters 17 are currently developed and producing oil and gas. The leases are developed from onshore and offshore locations, with wells directionally drilled from a fixed drill site (See Maps 1–4). There are currently four offshore drilling and production platforms and six man-made islands in state waters (see Table 4). These structures were constructed in the 1950's and 1960's with the exception of Platform Esther, originally installed as an island in 1965, but after severe storm damage, rebuilt as a platform in 1986. Seven platforms have been abandoned and removed from state tidelands.

Current daily production from state waters is 58,500 BBls of crude oil per day and 20,000 Mcf of gas per day. The cumulative totals for oil and gas production from California State waters as of January 1, 1999, are 2.2 billion BBls of oil and 1.6 billion Mcf of gas.

All of these facilities were installed prior to the passage of the Coastal Act, and were not therefore subject to Coastal Commission approval. However, the Commission did grant a coastal development permit for the conversion of Esther from an island to a platform in 1986.

**Table 4. Platforms in State Waters**

<b>Platform/ Island</b>	<b>Operator</b>	<b>Lease/Lease Sale</b>	<b>Field</b>	<b>Year Installed</b>	<b># of Well Slots</b>	<b>Water Depth (ft.)</b>
Emmy	Aera	425	Huntington Beach	1963	53	47
Eva	Torch	3033	Huntington Beach	1964	39	57
Esther**	Torch	3095	Belmont	1986	64	35
Belmont* (1)	Exxon	186	Belmont	1954	70	42
Grissom*	Thums	L.B. Unit	Wilmington	1967	224	40
White*	Thums	L.B. Unit	Wilmington	1967	176	40
Chaffee*	Thums	L.B. Unit	Wilmington	1967	261	40
Freeman*	Thums	L.B. Unit	Wilmington	1967	245	40
Rincon*	Rincon Island	1466	Rincon	1958	68	45
Holly	Venoco	3242	So. Ellwood	1966	30	211

\* Island

\*\* Initially an island, rebuilt as a platform

(1) Currently being abandoned

## **6.0 STATUS OF ALL NON-PRODUCING LEASES**

The petroleum industry currently possesses a total of 65 federal and state offshore leases that are not producing oil or gas. These offshore leases include 40 federal leases on the Outer Continental Shelf that were leased between 1968 and 1984, along with 25 state leases in California tidelands that were leased between 1958 and 1968 (See Maps 1–4). Most of these leases have been explored for oil and gas. None of the 40 federal leases have ever been developed.

However, 20 of the 25 non-producing state leases have produced oil at some time in the past. Lease 409, in federal waters is the only one of the 65 with a past-approved development and production plan (*See Appendix 1, Status of Undeveloped Federal Offshore Leases, and Appendix 2, Status of Active State Offshore Leases*).

The Coastal Commission staff believes that there are enough changed circumstances and potential changes in coastal zone impacts to warrant a new consistency review if the owners of Lease 409 choose to place a platform and develop the lease.

### **6.1 California Offshore Oil and Gas Energy Resources (COOGER)**

During the 1992–1997 federal lease sale comment period, a number of interested parties, including the Coastal Commission, expressed concern that the analysis of lease sales did not consider in any comprehensive fashion the potentially adverse onshore effects of offshore oil and gas development. In 1989, the National Academy of Sciences issued a report, confirming that the Department of the Interior lacked sufficient information about the onshore effects of offshore leasing and development, among other things, in order to make sound policy decisions. This report led to the 1990 moratorium on federal leasing, issued as an Executive Order by President George Bush.

In 1993, the Minerals Management Service (“MMS”) announced its California Offshore Oil and Gas Energy Resources (“COOGER”) Study, envisioning the report to address some long-standing concerns of the tri-county region (San Luis Obispo, Santa Barbara and Ventura counties) about the onshore effects of California offshore oil and gas development. Since 1993, the Coastal Commission and State Lands Commission have participated in a Steering Committee for the preparation of the COOGER Study, charged mainly with the tasks of quality control and content, while the MMS manages the day-to-day development of the study.

The COOGER Study is to examine select onshore constraints to developing the existing undeveloped offshore state and federal oil and gas leases. COOGER considers a potential range of different rates and configurations for developing the leases, including no new development whatsoever, over a 20-year period that starts January 1, 1995 and ends January 1, 2015.

The COOGER Study was originally designed to compare projected development scenarios with select onshore physical, environmental and socioeconomic constraints. However, after receiving public comments on a partial draft of the COOGER study, the Steering Committee decided in April 1999 to narrow the COOGER Study's contents to comparisons of projected development scenarios with onshore physical constraints only. This new focus eliminates review of environmental and socioeconomic constraints. Instead, environmental and socioeconomic issues will be addressed in site-specific environmental reviews if and when any new offshore oil and gas development occurs.

The COOGER study contractor is currently revising the study as directed by the Steering Committee. Once the draft is complete, the MMS plans to circulate it for public comment and hold public workshops. The MMS estimates release of a draft of the entire COOGER Study in June 1999.

## **6.2 Federal Waters**

### **6.2.1 Lease Terms**

Each of the 40 undeveloped leases has a primary lease term of five years. In accordance with MMS regulations, an oil and gas lease shall continue after its primary term for as long as oil or gas is produced from the lease in paying quantities, or drilling or well reworking operations are conducted (*30 CFR 256.37(b)*). Failure to meet these requirements may result in lease termination unless the lease term is otherwise extended.

The term of an oil and gas lease may be extended at the request of the lessee or at the direction of the MMS by means of a lease suspension. The 40 undeveloped federal leases are all beyond their primary lease term of five years. However, each of the leases has been extended through a series of lease suspensions (*See Appendices 1 and 3*).

A lease suspension extends the lease term for a period of time equal to the period of the suspension. At the request of a lessee or on its own initiative, the MMS may suspend production or operation of a lease or unit when it determines that to do so is in the national interest and necessary as defined in accordance with federal regulations (*30 CFR 250.110*). A suspension required by the MMS as opposed to one granted at the request of a lessee is known as a "directed suspension." A "suspension of production" ("SOP") may be granted for a lease with a well capable of producing in paying quantities. A "suspension of operation" ("SOO") may be granted for either producing or non-producing leases.

From January 1993 through June 1999, all of the leases have been under MMS directed suspension of operation during the preparation of the COOGER study. The original suspension was issued for the period between January 1, 1993, through December 31, 1995. MMS has since extended the suspension four times to allow the completion of the COOGER study. Unless

further extended, the suspension will terminate on June 30, 1999. The MMS advised the lessees to provide a written request for suspension by May 15, 1999, proposing to either (1) revise previously approved EPs, (2) propose new EPs, or (3) propose DPPs, if they wished to maintain their leases. The MMS specified that the requests for suspension must include a schedule for submissions of EPs or DPPs. The MMS has received the suspension requests, and is currently reviewing the submissions for completeness.

The MMS expects that the lessees will propose revisions to their EPs for additional seismic and resource surveys and delineation wells to enable the operators to plan for the development of the leases. The MMS believes that these revisions may result in impacts substantially different from those previously identified in the original EPs. In such case, new federal consistency review will be required (see Section 6.2.3 below).

### **6.2.2 Diligence Requirement**

In accordance with OCSLA Section 205(b)(4), an oil and gas lease entitles the lessee to explore, develop, and produce oil and gas contained in the lease area in accordance with “due diligence” requirements. The term “due diligence” or “reasonable diligence” appears in the lease instruments. It is not defined in either the OCSLA, the MMS regulations or the lease. Although the specific language varies somewhat for each lease sale, diligence requirements are generally described as the requirement to carry out all operations in a timely and orderly manner and in accordance with approved methods and practices (*e.g.*, “properly and timely developed and produced in accordance with sound operating principles”).

### **6.2.3 Past Coastal Commission Action to Explore/Develop Federal Leases**

Between 1981–85, leaseholders proposed plans for the exploration of 35 of the 40 federal tracts not yet developed. The Coastal Commission concurred with federal consistency certifications for exploration of 34 of the 40 leases. The Coastal Commission objected to the exploration plan (“EP”) for Lease 414. No EPs have been submitted for Leases 210, 429, 462, 464 and 527. A total of 139 exploratory wells on 34 leases have Coastal Commission approval. To date, 39 wells have been drilled on 23 of the 34 leases with Coastal Commission approved EPs. There are 100 wells with Coastal Commission approval that have not been drilled. Discoveries have occurred on 18 leases. Forty-seven approved wells have not been drilled on leases for which no discoveries have been made.<sup>6</sup> In 1987 the Coastal Commission also approved one development and production plan (“DPP”) for Lease 409—Platform Julius. Platform Julius was not installed (*See Appendix I*).

The MMS estimates that of the 40 undeveloped leases 14 could potentially be developed from existing platforms as reflected below in Table 5. A total of four new platforms may be necessary

<sup>6</sup> Leases 319, 402, 420, 421, 425, 426, 430, 431, 432, 433, 445, 453, 499, and 500.

to develop the remaining 26 leases. However, future advances in drilling technology may allow development of these leases with fewer platforms.

The 40 undeveloped leases are organized into nine separate “units” and one lease not within a unit (See discussion of “unitization” in Section 3.1.10 of this report). A unit provides for the minimum number of leases that will allow the lessees to minimize the number of platforms, facility installations, and wells necessary for efficient exploration, development, and production. Unitization is addressed in 30 CFR 250.1300.

Leases are organized into operating units (for exploration, development, and production) to promote and expedite exploration and development, to conserve natural resources, to prevent waste, and to protect correlative rights including federal royalty interests. Typically, a unit operator is designated by the lessees. The operator is the point of contact for all issues pertaining to the unit.

Rather than work with multiple EPs on each unit, a single EP for each unit can address the required delineation wells (for those units with a discovery) or exploration wells (for the one unit that has yet to be drilled).

**Table 5. Federal Leases Developable from Existing or New Platforms**

Unit Name	Lease #s	Owner/Operator	Reachable from Existing Platform	Possible New Platform
Cavern Point	210, 527	Venoco	Platform Gail/Grace	
Gato Canyon	460, 462, 464	Samedan	No	Likely
Sword	319, 320, 322, 323A	Conoco	Platform Hermosa	
Rocky Point	452, 453	Chevron	Point Arguello Platforms*	
Bonito	443, 445, 446, 449, 499, 500	Nuevo	Possibly tie into Platform Irene via pipeline	Likely
Santa Maria	420, 424, 425, 429, 430, 431, 433, 434	AERA	No	1 new platform likely to access both of these units
Purisima Point	426, 427, 432, 435	AERA	No	
Point Sal	415, 416, 421, 422	AERA	No	1 new platform likely to access both of these units
Lion Rock	396, 397, 402, 403, 408, 414, 409**	AERA	No	

\* Harvest, Hermosa, Hidalgo

\*\* Lease 409 is adjacent to but is not currently part of the Lion Rock Unit

#### **6.2.4 Coastal Commission Role in Reviewing Future Plans of Exploration/Development of the OCS**

##### *Newly Proposed Activities*

The CZMA provides that OCS exploration plans (“EP”) or development and production plans (“DPP”) shall be consistent with the federally approved coastal management programs of affected states in order for those oil and gas plans to be approved. Accordingly, any newly proposed EP or DPP is subject to Coastal Commission federal consistency review. Lease 409 could potentially be developed under the previously approved DPP. The remaining 39 leases will need MMS approval and Coastal Commission consistency review before development can occur. The federal consistency review process is discussed in greater detail in Section 2.9 of this report.

##### *Renewals or Major Amendments for Activities not Previously Reviewed*

The regulations that implement the CZMA provide that renewals or major amendments to federal permits or licenses for activities not previously reviewed by the state that effect the coastal zone are subject to federal consistency review (*15 CFR §930.51(b)(1)*).

##### *Previously Reviewed Activities*

With respect to the 34 OCS EPs and the one DPP for which the Coastal Commission has granted consistency certification, the Coastal Commission retains federal consistency review over any renewals or major amendments. However, the CZMA’s regulations in *15 CFR §§ 930.51* and *930.71* limit consistency of activities previously reviewed by the State agency to renewals or modification that will cause coastal zone effects substantially different than those originally reviewed.

In addition, *15 CFR § 930.86* authorizes the Coastal Commission to monitor previously reviewed activities. **The Commission may request from the MMS an additional consistency review if it determines that an MMS-approved activity either is not being conducted in accordance with an approved EP or DPP, or is having coastal zone effects substantially different than described in the original review.** The Coastal Commission may appeal to the Secretary of Commerce a refusal by the MMS to grant a request for such an additional review. In either case, the Coastal Commission or its staff must determine that the activities are causing coastal zone effects **substantially** different than those originally reviewed by the Coastal Commission in order to have an opportunity for a new consistency review.

##### *Re-Leasing*

As discussed in Section 3.1.8 above, the Coastal Zone Reauthorization Act of 1990 clarified that OCS lease sales are subject to the federal consistency review process. Therefore, the proposed



re-leasing of any previously expired OCS leases would trigger Coastal Commission federal consistency review. If any of the 40 undeveloped OCS leases were to expire, their re-leasing would be subject to Coastal Commission review.

### **6.3 State Waters**

#### **6.3.1 Development Potential**

Of 42 total active state leases, 25 are not currently producing oil or gas. Of the 25 non-producing leases, the State Lands Commission estimates that 20 have future development potential. However, it is unlikely that all of these 20 leases will be developed. (Please see Maps 1–4 for lease locations and Appendix 2 for additional details on state leases).

Although the five remaining state leases may have exploratory prospects, the lack of readily available onshore or offshore drill sites or industry interest indicates that there will be no active exploration program on these leases and that they will most likely be returned to the state.

#### **6.3.2 Lease Terms/Due Diligence Requirements**

State leases generally provide for an initial drilling term within which time the lessee must initiate drilling operations. Most of the leases provide for the drilling term to be three years from the date of issuance of the lease. The lessee may start and stop drilling operations at any time within this period. Beyond the three years in which the lessee has to initiate drilling the leases call for new wells to be drilled, with no more than 120 days between wells, until the lease is completely developed. The drilling moratorium established by the State Lands Commission in 1969 suspended this obligation.

#### **6.3.3 Coastal Commission Role in Reviewing Future Plans of Exploration/Development in State Tidelands**

A lessee who proposes to explore or develop a state lease must obtain a coastal development permit if the project is proposed in state waters or onshore within the coastal zone. The Coastal Commission has coastal development permit jurisdiction over development activities in state waters. The Coastal Commission also has permit jurisdiction over onshore projects located in areas where the local government does not have a certified local coastal program (“LCP”). The standard of review is the Chapter 3 policies of the Coastal Act.

If a project is proposed onshore in an area where the local government has a certified LCP, the local government has coastal development permit issuance authority. The standard of review for a project that requires a coastal development permit from a local government with a certified LCP is the policies and implementing ordinances of the certified LCP. However, major energy projects are appealable to the Coastal Commission.

## **7.0 APPROVALS NECESSARY TO DEVELOP OIL AND GAS LEASES**

Pursuant to *Section 307(c)(3)(B) of the Coastal Zone Management Act (16 U.S.C. § 1456(c)(3)(B))*, all applicants for MMS approval of a plan for development of or production from an area leased under the OCS Lands Act shall provide to the Coastal Commission a “consistency certification” that the proposed activity complies with and will be conducted in a manner consistent with policies and standards contained in California’s federally-approved Coastal Management Program (“CCMP”). In addition, other federal, state and local approvals will be required depending on the configuration of the development plan. Examples of these are:

- The United States Army Corps of Engineers
- U.S. Coast Guard
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. National Marine Fisheries Service
- California State Lands Commission
- Local Air Pollution Control District
- Local government in the county where the oil is being brought ashore.

Since 1973 approvals from a variety of state and local governmental agencies have facilitated development on state leases. To develop the five remaining undeveloped state leases, or expand existing developed leases, would require similar approvals from agencies such as the following:

- California State Lands Commission
- Coastal Commission
- Department of Fish and Game
- Office of Oil Spill Prevention and Response
- Department of Oil, Gas and Geothermal Resources
- Regional Water Quality Control Board
- Local Air Pollution Control District
- Local government
- US Army Corps of Engineers if a new platform is placed in State waters
- Minerals Management Service if a federal platform is used as a drill site

## **8.0 POTENTIAL NEXT STEPS FOR THE COASTAL COMMISSION**

The Coastal Commission has regulatory responsibilities under the California Coastal Act and the federal Coastal Zone Management Act that it must adhere to in further actions regarding the 40 non-producing OCS leases. A key element of the Commission’s regulatory responsibility is to review each proposed oil and gas development or activity on a case-by-case basis. The Coastal Commission staff will take the following next steps to continue the Coastal Commission’s involvement in reviewing potential further exploration and development on the 40 non-producing OCS leases:

## **8.1 Review Requests for Suspensions**

The Coastal Commission staff will work with MMS to actively review (in consultation with other interested parties) the requests for suspensions and respond to the MMS on whether the lessees' suspension proposals have appropriate environmental analysis and safeguards built into the schedules of activities prior to MMS' June 30, 1999 action.

## **8.2 Request that the MMS Notify the Commission of All Changes Proposed to Past Consistency Approvals**

Review all suspension requests to determine if there is adequate information currently available to determine if a new federal consistency certification for the exploration plans and other activities specified in the suspension request is appropriate. Staff will work with MMS to try to come to agreement on the consistency review process for all activities specified in any suspension granted by the MMS.

## **8.3 Hold a Coastal Commission Workshop in Late Summer or Fall 1999**

The Coastal Commission staff proposes to schedule a follow-up Commission workshop to discuss the Coastal Act issues that the activities proposed by the lessees of the 40 non-producing leases raise. A workshop will allow all parties to discuss some of the critical Coastal Act issues including but not limited to:

- ▲ Oil spill prevention and clean-up
- ▲ Marine resources
- ▲ Air quality
- ▲ Onshore pipeline transportation of oil to refinery destinations
- ▲ Visual impacts
- ▲ Policies of the LCPs of affected local governments
- ▲ Commercial and sport fishing
- ▲ Consolidation of facilities
- ▲ Protected species

Identification and discussion of these issues in a public forum prior to submission of individual consistency certifications would be valuable to all parties.

#### **8.4 Determine for Each Lease Whether Additional Consistency Review will be Required**

It is necessary to conduct a case-by-case review of past Coastal Commission consistency actions and compare that action with the lessees' proposed activities and schedule to determine if a new consistency review will be required.

#### **8.5 Conduct Federal Consistency Review of All New Proposed Seismic Surveys**

The Coastal Commission staff will process all proposals for high energy seismic surveys pursuant to the agency review process agreed to by the High Energy Seismic Survey ("HESS") Team. Since 1996, the Coastal Commission and State Lands Commission have participated in an MMS-sponsored HESS Team to develop a recommendation for improving the process that regulatory agencies follow in reviewing high energy seismic surveys. A seismic survey proposed in federal waters will require federal consistency review.

#### **8.6 Conduct Federal Consistency Review of All Proposed Exploration Plans**

As they are submitted over the next few years, the Coastal Commission staff will review and schedule public hearings for Commission review and action on each consistency certification for exploration plans. Commission staff will work closely with the MMS, local governments, and other interested parties to share information as it becomes available about proposed activities.

#### **8.7 Conduct Federal Consistency Review of All Proposed Development and Production Plans**

As they are submitted over the next few years, the Coastal Commission staff will review and schedule public hearings for Commission review and action on each consistency certification for development and production plans. Commission staff will work closely with the MMS, local governments, and other interested parties to share information as it becomes available about proposed activities.

## 9.0 GLOSSARY OF TERMS

**Barrel (BBL)** — A barrel of oil equals 42 gallons.

**Block** — A geographical area having a square dimension of approximately three miles on a side (nine square miles, 5,760 acres, or 2,331 hectares) on the California (Lambert) Plane Coordinate System and 5,693 acres (2,304 hectares) on the Universal Transverse Mercator System (used north of Point Conception and southwest of San Diego). It is used in official MMS protraction diagrams or leasing maps (see Tract).

**BPD (bpd)** — Barrels per day.

**California Coastal Act** — A law enacted by the California legislature in 1976 which regulates development within the coastal zone from the Oregon border to the border of Mexico. The policies of the Act are aimed at protection and preservation of coastal environmental resources as well as the protection and promotion of public use and enjoyment of coastal resources. The Coastal Commission established under the Act regulates development in the zone through a coastal permit process until local governments in the zone establish their local coastal programs (LCPs). The Commission retains permit and appeal authority over certain areas and/or over certain types of development.

**California Coastal Management Program (CCMP)** — The management program for the coastal zone of the state of California that the NOAA approved in 1978 pursuant to section 306 of the CZMA. The term "management program" is defined in section 304(12) of the CZMA.

**Christmas Tree** — The assembly of pipes, valves, and fittings at the top of the casing which is used to control the flow of oil and gas from a producing well.

**Coastal Zone Boundary** — The specific mapped area of the State of California established by the Coastal Act of 1976 from the Oregon border to the border of the Republic of Mexico which extends seaward to the State's outer limit of jurisdiction, including all offshore islands, and extending inland generally 1,000 yards from the mean high tide line of the sea. In significant coastal estuarine, habitat, and recreational areas it extends inland to the first major ridgeline paralleling the sea or five miles from the near high tide line of the sea, whichever is less, and in developed urban areas the zone generally extends inland less than 1,000 yards.

**Coastal Zone Management Act (CZMA)** — A federal law enacted in 1972 to "protect, preserve, develop and, where possible, restore, or enhance the resources of the nation's coastal zone," through encouragement and assistance to states and through state participation in decisions affecting the coastal zone. The states establish coastal management programs subject to federal review and approval which outline principles for development and protection. Federal actions must be consistent with State Coastal Management Plans to the maximum extent

practicable. Applicants for federal licenses and permits must submit consistency certifications. A 1976 amendment provides that OCS lessees must submit a consistency certification on exploration and development and production plans for State review and concurrence. An objection can be appealed to the Secretary of Commerce.

**Development** — Activities that take place following exploration for, discovery of, and delineation of hydrocarbons in commercially recoverable quantities (including but not limited to geophysical activity, drilling, platform construction, placement, and operation of all directly related onshore support facilities) and that are for the purpose of ultimately producing the hydrocarbons discovered.

**Development and Production Plan (DPP)** — A plan describing the specific work to be performed on an offshore lease or leases, including all development and production activities that the operator proposes to undertake during the time period covered by the plan and all actions to be undertaken up to and including the commencement of sustained production. The plan also includes descriptions of facilities and operations to be used; well locations; current geological and geophysical information; environmental safeguards; safety standards and features; time schedules; and other relevant information. Under 30 CFR 250.34, all lease operators are required to formulate and obtain approval of such plans by MMS. Before final approval by MMS, the operator must receive a consistency certification by the California Coastal Commission or an override to a Commission objection by the Secretary of Commerce. If the plan is for development in state tidelands, then the lease operation must receive approval from the State Lands Commission as well as coastal permit approval from the Coastal Commission.

**Exploration** — The process of searching for hydrocarbons. Exploration activities include (1) geophysical surveys where magnetic, gravity, seismic, or other systems are used to detect or infer the geologic conditions conducive to the accumulation of such minerals; and (2) any drilling, except development drilling, whether on or off known geological structures. Exploration also includes the drilling of a well in which a discovery of oil or natural gas in paying quantities is made and the drilling of any additional well after such a discovery that is needed to delineate a reservoir and to enable the lessee to determine whether to proceed with development and production.

**Exploration Plan (EP)** — A plan based on all available relevant information about a leased area that identifies, to the maximum extent possible, all the potential hydrocarbon accumulations and wells that the operator proposes to drill to evaluate the accumulations within the entire area of the lease(s) covered by the plan. Under 30 CFR 250.33, all lease operators are required to formulate and obtain approval of such plans by the Regional Director of MMS before exploration activities can commence. Before final approval by MMS, the operator must receive a consistency certification by the California Coastal Commission or an override to a Commission objection by the Secretary of Commerce. If the plan is for development in state tidelands, then the lease operator must receive approval from the State Lands Commission as well as a coastal

permit approval from the Coastal Commission and any other applicable state, federal, and local permits.

**Field** — An area within which hydrocarbons have been concentrated and trapped in economically producible quantities in one or more structural or stratigraphic related reservoirs.

**Lease** — A contract authorizing exploration for and development and production of minerals; the land covered by such a contract.

**Lease Sale** — The public opening of sealed bids made after competitive submittal for leases granting companies or individuals the right to explore for and develop certain minerals within a defined period of time.

**Local Coastal Program (LCP)** — Individual county and city coastal programs mandated by the California Coastal Act of 1976, each consisting of a land-use plan and zoning implementation ordinances.

**OCS Lands Act (OCSLA)** — A federal law enacted in 1953 which gave primary control to the federal government of submerged lands beyond the three-mile limit of the territorial sea. The Act was amended in 1978 to require the Secretary of Interior (DOI) to select the size, timing, and location of lease sales in a manner that balances the potential for oil discovery and adverse impacts on the coastal zone. The Act was amended again in 1986 to require the distribution of a portion of the receipts from the leasing of mineral resources of the OCS to coastal states.

**OCS Orders** — Orders issued by the Minerals Management Service (MMS) for each OCS area. These orders govern oil and **gas lease operations and specify procedures and practices** that are required by the MMS during exploration and development and production activities. In 1988, MMS consolidated and restructured the regulations at 30 CFR 250 Parts 250 and 256, which govern oil, gas, and sulphur exploration, development, and production on the OCS. At that time, OCS Orders were incorporated into these regulations.

**Outer Continental Shelf (OCS)** — All submerged lands lying seaward of the state tidelands. Jurisdiction and control over these lands was asserted in 1945 by President Truman. The so-called Truman Proclamations were incorporated into domestic law by enactment of Congress in 1953 of the Submerged Lands Act (67 Stat. 29) and the Outer Continental Shelf Lands Act (67 Stat. 462).

**Platform** — A fixed steel or concrete structure from which offshore development wells are drilled and produced oil/gas/water is processed. It consists of a jacket or welded frame which is positioned almost totally underwater and attached to the ocean floor with piles driven through hollow legs. The deck section where drilling activities occur is welded to the top of the jacket.

**Produced Water** — Salt water produced from the oil from a well.

**Production** — Activities that take place after the successful establishment of means for the removal of hydrocarbons, including such removal, field operations, transfer of hydrocarbons to shore, operation monitoring, maintenance, and workover drilling.

**Seismic Survey** — The investigation of underground strata by recording and analyzing shock waves artificially produced and reflected from subsurface bodies of rock.

**Stipulations** — Conditions of leases under which the federal offshore leases must be developed.

**Submerged Lands** — As defined in section 13577(e) of the Commission's regulations, "submerged lands" are "lands which lie below the line of mean low tide."

**Submerged Lands Act** — A federal statute comprising Chapter 29 of Title 43, United States Code. Subchapter III of the Submerged Lands Act is also known as the Outer Continental Shelf Lands Act (OCSLA).

**Subsea Completion** — A production well in which the Christmas tree assembly is located at or near the ocean bottom rather than on a platform. The produced liquids or gases are then transferred from the well head either to a nearby fixed platform or to a shore facility for processing.

**Tide Lands** — As defined in section 13577(d) of the Commission's regulations, "tidelands" are "lands which are located between the lines of mean high tide and mean low tide."

**Tract** — An areal unit usually consisting of a single block from an official protraction diagram. Groups of tracts, having sale-specific numbers, were selected and offered for lease prior to implementation of areawide leasing. Through Lease Sale 80, this was an identification number assigned to a block for a particular lease sale. In the future, MMS will not use tract numbers (see Block).

**Unitization** — A process by which two or more leaseholders allow one company to serve as the operator for exploration, development, and/or production of the affected leases.



**Appendix 1: Federal Undeveloped Lease Table***Note regarding status: the California Coastal Commission will make a case-by-case review of each.*

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
N/A	409	Aera <sup>7</sup> Delta <sup>8</sup> Ogle <sup>9</sup> OLAC <sup>10</sup> Samedan <sup>11</sup>	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 7/86–6/87 SOP* for proposed installation of Platform Julius.</li> <li>▲ 7/87–6/89 SOP to obtain permits for construction and installation of Platform Julius.</li> <li>▲ 6/89–6/90 SOP to obtain permits, reinterpret 3D seismic data, participate in cooperative effort to secure a drilling rig (IROCC).</li> <li>▲ 7/90–6/94 SOP to reinterpret 3D seismic data, participate in rig cooperative, unitize with Lion Rock Unit.</li> <li>▲ 1/93–3/99 Directed SOO<sup>†</sup> for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 9 exploratory wells approved by CCC.</li> <li>▲ 6 wells drilled between 11/82 and 3/84.</li> <li>▲ 3 previously approved wells have not been drilled.</li> </ul>
Lion Rock Unit	396 402 408 414	Aera Norcen <sup>12</sup>	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/90 SOP to drill unit well by 1/90.</li> <li>▲ 7/90–6/94 SOP to participate in rig cooperative (IROCC). Drill and test well. Unitize with 0409.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 24 exploratory wells approved by CCC for Lion Rock Unit.</li> <li>▲ 6 wells drilled between 6/82-4/85.</li> <li>▲ 18 previously approved wells have not been drilled.</li> </ul> <p>continued to next page</p>

<sup>7</sup> Aera Energy, LLC<sup>8</sup> Delta Petroleum Corporation<sup>9</sup> Ogle Petroleum, Inc.<sup>10</sup> OLAC Resources, LLC<sup>11</sup> Samedan Oil Corporation

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Lion Rock Unit	397 403	Aera Norcen Nuevo <sup>13</sup>	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/90 SOP to drill unit well by 1/90.</li> <li>▲ 7/90–6/94 SOP to participate in rig cooperative (IROCC). Drill and test well. Unitize with 0409.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards, Part (c).</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> </ul>	see previous
Point Sal Unit	415 421	Aera Delta Nuevo Ogle OLAC Samedan	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 6/86–12/87 SOP to acquire and interpret 3D seismic data; simulation of Monterey reservoir.</li> <li>▲ 12/87–12/89 SOP to drill unit well by 6/89, finalize 3D analysis.</li> <li>▲ 7/89–6/94 SOP to participate in rig cooperative (IROCC), drill and test well, evaluate results, commence development planning.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 14 exploratory wells approved by CCC for Point Sal Unit.</li> <li>▲ 4 wells drilled between 1/84 and 9/85.</li> <li>▲ 10 previously approved wells have not been drilled.</li> </ul> <p>continued to next page</p>

<sup>12</sup> Norcen Explorer, Inc.<sup>13</sup> Nuevo Energy Company

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Point Sal Unit	416 422	Aera Delta Nuevo Ogle OLAC Samedan	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 6/86–12/87 SOP to acquire and interpret 3D seismic data; simulation of Monterey reservoir.</li> <li>▲ 12/87–12/89 SOP to drill unit well by 6/89, finalize 3D analysis.</li> <li>▲ 7/89–6/94 SOP to participate in rig cooperative (IROCC), drill and test well, evaluate results, commence development planning.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards, Part (c).</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	see previous
Purissima Point Unit	426	Aera	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/90 SOP to drill unit well by 1/90. Analyze 3D data.</li> <li>▲ 7/90–6/94 SOP to reinterpret 3D seismic, redefine unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 21 exploratory wells approved by CCC for Purissima Point Unit.</li> <li>▲ 3 wells drilled between 11/82 and 9/83.</li> <li>▲ 18 previously approved wells have not been drilled.</li> </ul> <p>continued to next page</p>

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Purissima Point Unit	427 432	Aera Nuevo Ogle OLAC Pennzoil <sup>14</sup> Samedan	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/90 SOP to drill unit well by 1/90. Analyze 3D data.</li> <li>▲ 7/90–6/94 SOP to reinterpret 3D seismic, redefine unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards, Part (c).</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustment.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	see previous
	435	Aera Nuevo	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/90 SOP to drill unit well by 1/90. Analyze 3D data.</li> <li>▲ 7/90–6/94 SOP to reinterpret 3D seismic, redefine unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	

<sup>14</sup> Pennzoil Exploration & Production Company

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Santa Maria Unit	420 424 425	Aera Elf <sup>15</sup>	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 7/86–11/86 Unit held by drilling.</li> <li>▲ 11/86–11/87 SOP for heavy oil study, acquisition and interpretation of 3D seismic data.</li> <li>▲ 11/87–11/89 SOP for 3D seismic interpretation.</li> <li>▲ 11/89–6/94 SOP for 3D seismic interpretation, redefining unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 31 exploratory wells approved by CCC for Santa Maria Unit.</li> <li>▲ 5 wells drilled between 5/82 and 6/86.</li> <li>▲ 26 previously approved wells have not been drilled.</li> </ul>
	429	Ogle OLAC Nuevo RAM Samedan	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 7/86–11/86 Unit held by drilling.</li> <li>▲ 11/86–11/87 SOP for heavy oil study, acquisition and interpretation of 3D seismic data.</li> <li>▲ 11/87–11/89 SOP for 3D seismic interpretation.</li> <li>▲ 11/89–6/94 SOP for 3D seismic interpretation, redefining unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> </ul>	continued to next page

<sup>15</sup> Elf Aquitaine Oil Programs

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Santa Maria Unit	430	Aera Elf	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 7/86–11/86 Unit held by drilling.</li> <li>▲ 11/86–11/87 SOP for heavy oil study, acquisition and interpretation of 3D seismic data.</li> <li>▲ 11/87–11/89 SOP for 3D seismic interpretation.</li> <li>▲ 11/89–6/94 SOP for 3D seismic interpretation, redefining unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> </ul>	see previous
	431	Aera Elf	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 7/86–11/86 Unit held by drilling.</li> <li>▲ 11/86–11/87 SOP for heavy oil study, acquisition and interpretation of 3D seismic data.</li> <li>▲ 11/87–11/89 SOP for 3D seismic interpretation.</li> <li>▲ 11/89–6/94 SOP for 3D seismic interpretation, redefining unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Santa Maria Unit	433	Ogle OLAC Nuevo RAM <sup>16</sup> Samedan	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 7/86–11/86 Unit held by drilling.</li> <li>▲ 11/86–11/87 SOP for heavy oil study, acquisition and interpretation of 3D seismic data.</li> <li>▲ 11/87–11/89 SOP for 3D seismic interpretation.</li> <li>▲ 11/89–6/94 SOP for 3D seismic interpretation, redefining unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> </ul>	see previous
	434	Aera Elf	Aera	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 7/86–11/86 Unit held by drilling.</li> <li>▲ 11/86–11/87 SOP for heavy oil study, acquisition and interpretation of 3D seismic data.</li> <li>▲ 11/87–11/89 SOP for 3D seismic interpretation.</li> <li>▲ 11/89–6/94 SOP for 3D seismic interpretation, redefining unit boundaries, participate in rig cooperative (IROCC), drill and test well, evaluate results.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	

<sup>16</sup> RAM Energy, Inc.

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Bonito Unit	443	Nuevo Poseidon <sup>17</sup>	Chevron Nuevo	53	5/81	5/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/89 SOP to interpret 3D seismic data.</li> <li>▲ 6/89–12/89 SOP to complete 3D analysis, resolve permitting problems.</li> <li>▲ 12/89–12/94 SOP to process and interpret 3D seismic data, permitting delays at Gaviota, participate in rig cooperative (IROCC), spud unit well in first quarter 1994.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards, Part (b)</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 24 wells approved by CCC for Bonito Unit.</li> <li>▲ 10 wells drilled between 4/82 and 9/85.</li> <li>▲ 14 previously approved wells have not been drilled.</li> </ul>
	445 449 500	Nuevo Poseidon	Nuevo	53	5/81	5/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/89 SOP to interpret 3D seismic data.</li> <li>▲ 6/89–12/89 SOP to complete 3D analysis, resolve permitting problems.</li> <li>▲ 12/89–12/94 SOP to process and interpret 3D seismic data, permitting delays at Gaviota, participate in rig cooperative (IROCC), spud unit well in first quarter 1994.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards, Part (b)</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> </ul>	continued to next page

<sup>17</sup> Poseidon Petroleum, LLC



Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Bonito Unit	446	Nuevo Poseidon	Nuevo	53	5/81	5/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/89 SOP to interpret 3D seismic data.</li> <li>▲ 6/89–12/89 SOP to complete 3D analysis, resolve permitting problems.</li> <li>▲ 12/89–12/94 SOP to process and interpret 3D seismic data, permitting delays at Gaviota, participate in rig cooperative (IROCC), spud unit well in first quarter 1994.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards, Part (b)</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	see previous
	499	Nuevo	Nuevo	RS2	5/81	5/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to acquire and interpret 3D seismic data.</li> <li>▲ 6/88–6/89 SOP to interpret 3D seismic data.</li> <li>▲ 6/89–12/89 SOP to complete 3D analysis, resolve permitting problems.</li> <li>▲ 12/89–12/94 SOP to process and interpret 3D seismic data, permitting delays at Gaviota, participate in rig cooperative (IROCC), spud unit well in first quarter 1994.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards, Part (b)</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Royalty Rate Adjustments.</li> </ul>	

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Rocky Point Unit	452 453	Whiting <sup>18</sup>	Chevron	53	7/81	7/86	<ul style="list-style-type: none"> <li>▲ 6/86–6/88 SOP to drill from Hermosa to 451.</li> <li>▲ 6/88–6/90 SOP for extended production test for well B-7.</li> <li>▲ 3/90–12/94 SOP for one year production test, permitting problems at Gaviota.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 6 wells approved by CCC.</li> <li>▲ 4 wells drilled between 9/82 and 6/84.</li> <li>▲ 2 previously approved wells have not been drilled.</li> </ul>
Sword Unit	319	Amber <sup>19</sup> Conoco <sup>20</sup> Fina <sup>21</sup> Nuevo Ogle OLAC Petrofina <sup>22</sup> Samedan	Conoco	48	9/79	9/84	<ul style="list-style-type: none"> <li>▲ 8/84–8/85 SOP to evaluate seismic data, spud unit well by 1/85.</li> <li>▲ 2/85–5/85 Drilling delineation well.</li> <li>▲ 8/85–11/85 SOP to analyze well test results.</li> <li>▲ 11/85–12/87 SOP to spud well by 7/87.</li> <li>▲ 12/87–6/89 SOP to process and interpret 3D seismic data.</li> <li>▲ 6/89–6/94 SOP to continue seismic interpretation, drill 3 wells, participate in rig cooperative (IROCC), develop technology for heavy oil, submit development plan.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Protection of Biological Resources.</li> <li>▲ Transportation of Hydrocarbon Products.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 11 wells approved by CCC.</li> <li>▲ 3 wells drilled between 3/82 and 2/85.</li> <li>▲ 8 previously approved wells have not been drilled.</li> </ul> <p>continued to next page</p>

<sup>18</sup> Whiting Petroleum Corporation<sup>19</sup> Amber Resources, LLC<sup>20</sup> Conoco, Inc.<sup>21</sup> Fina Oil & Chemical Company

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Sword Unit	320 322 323A	Amber Colton <sup>23</sup> Conoco Delta Elf Fina Nuevo Ogle OLAC Petrofina Pioneer <sup>24</sup> Samedan	Conoco	48	9/79	9/84	<ul style="list-style-type: none"> <li>▲ 8/84–8/85 SOP to evaluate seismic data, spud unit well by 1/85.</li> <li>▲ 2/85–5/85 Drilling delineation well.</li> <li>▲ 8/85–11/85 SOP to analyze well test results.</li> <li>▲ 11/85–12/87 SOP to spud well by 7/87.</li> <li>▲ 12/87–6/89 SOP to process and interpret 3D seismic data.</li> <li>▲ 6/89–6/94 SOP to continue seismic interpretation, drill 3 wells, participate in rig cooperative (IROCC), develop technology for heavy oil, submit development plan.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Protection of Biological Resources.</li> <li>▲ Transportation of Hydrocarbon Products.</li> </ul>	see previous page
Gato Canyon Unit	460 462	Amber Delta Norcen Nuevo Nycal <sup>25</sup> Ogle OLAC Samedan	Samedan	68	8/82	8/87	<ul style="list-style-type: none"> <li>▲ 8/87–7/89 SOP for interpretation of 3D seismic data, drill and test unit well.</li> <li>▲ 1/89–4/89 Drilling delineation well.</li> <li>▲ 7/89–7/91 SOP for acquisition and interpretation of 3D seismic data to delineate western portion of unit, participate in rig cooperative (IROCC).</li> <li>▲ 6/90–7/94 SOP to complete 3D interpretation, spud unit well by 12/93.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	<ul style="list-style-type: none"> <li>▲ 4 wells approved by CCC.</li> <li>▲ 2 wells 5/85 and 1/89.</li> <li>▲ 2 wells have not been drilled.</li> </ul> <p>continued to next page</p>

<sup>22</sup> Petrofina Delaware, Inc.<sup>23</sup> Colton Gulf Coast, Inc.<sup>24</sup> Pioneer Resources & Producing, L.P.<sup>25</sup> Nycal Corporation

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Gato Canyon Unit	464	Amber Delta Norcen Nuevo Nycal Ogle OLAC Samedan	Samedan	68	8/82	8/87	<ul style="list-style-type: none"> <li>▲ 8/87–7/89 SOP for interpretation of 3D seismic data, drill and test unit well.</li> <li>▲ 1/89–4/89 Drilling delineation well.</li> <li>▲ 7/89–7/91 SOP for acquisition and interpretation of 3D seismic data to delineate western portion of unit, participate in rig cooperative (IROCC).</li> <li>▲ 6/90–7/94 SOP to complete 3D interpretation, spud unit well by 12/93.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Potential Geologic Hazards.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Drilling Restrictions near State Boundary.</li> </ul>	see previous page
Cavern Point Unit	210	Poseidon	Chevron	P4	4/68	4/73	<ul style="list-style-type: none"> <li>▲ 3/73–7/90 Lease 0210 was in the Santa Clara Unit and held by unit production.</li> <li>▲ 11/89–7/90 Lease 0527 was in the Santa Clara Unit and held by unit production.</li> <li>▲ 7/90–12/94 SOO to complete permitting for exploration plan, reinterpret seismic data, participate in rig cooperative (IROCC), spud unit well.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	Federal Register, Vol.32, No. 250	▲ No wells drilled.

\* Suspension of Production

† Suspension of Operations

Unit	Lease	Owner(s)	Operator	Lease Sale	Lease Date	Original 5-Year Term	Lease Term Extensions	Major Stipulations	Status
Cavern Point Unit	527	Poseidon	Chevron	80	12/84	12/89	<ul style="list-style-type: none"> <li>▲ 3/73–7/90 Lease 0210 was in the Santa Clara Unit and held by unit production.</li> <li>▲ 11/89–7/90 Lease 0527 was in the Santa Clara Unit and held by unit production.</li> <li>▲ 7/90–12/94 SOO to complete permitting for exploration plan, reinterpret seismic data, participate in rig cooperative (IROCC), spud unit well.</li> <li>▲ 1/93–3/99 Directed SOO for COOGER Study.</li> </ul>	<ul style="list-style-type: none"> <li>▲ Protection of Biological Resources.</li> <li>▲ Protection of Cultural Resources.</li> <li>▲ Operational Controls, electromagnetic Emissions, and Evacuation.</li> <li>▲ Hold Harmless.</li> <li>▲ Transportation of Hydrocarbon Products.</li> <li>▲ Wells and Pipelines.</li> <li>▲ Fisheries and Wildlife Training Program.</li> <li>▲ Protection of Important Biological Resources, Parts (a), and (b).</li> <li>▲ Testing of Oil Spill Containment Equipment.</li> <li>▲ Onshore Oil Processing.</li> <li>▲ Protection of Commercial Fisheries.</li> <li>▲ Protection of Marine Biota.</li> <li>▲ Protection of Air Quality.</li> </ul>	▲ No wells drilled.

## Appendix 2: Status of Active State Leases

LEASE	OPERATOR	COUNTY	ACREAGE	DATE ISSUED	BONUS \$	PRIMARY LEASE TERM	DUE DILIGENCE REQUIREMENTS	FUTURE POTENTIAL	ANTICIPATE Q/C	DEVELOPMENT FROM EXISTING FACILITIES	MORATORIUM STILL IN EFFECT
3455	ARCO Long Beach	Los Angeles	592	3/11/66	None	L.B. Unit	None	Development	No	Yes	No
91	Aera	Orange	589	5/21/43	None	20 yrs +	None	Development	No	Yes	No
163	Aera	Orange	640	11/15/44	None	20 yrs +	None	Development	No	Yes	No
392	Aera	Orange	835	9/20/38	None	20 yrs +	None	Development	No	Yes	No
425	Aera	Orange	835	2/10/50	None	20 yrs +	None	Development	No	Yes	No
426	Aera	Orange	640	2/10/50	None	20 yrs +	None	Development	No	Yes	No
4736	Aera	Orange	70	1/25/73	None	CEQ	None	Development	No	Yes	N/A
1482	Breitburn	Orange	54	1/21/55	None	Drainage/CEQ	None	Development	No	Yes	N/A
186	Exxon	Orange	1255	9/24/45	None	20 yrs +	None	Development	No	Yes	No
3033	Torch	Orange	2113	7/25/63	\$6,110,000.00	20 yrs +	None	Development	No	Yes	No
3095	Torch	Orange	3360	1/30/64	\$4,066,676.00	20 yrs +	Yes	Development	No	Yes	No
3413	Torch	Orange	1871	12/1/65	None	20 yrs +	None	Development	No	Yes	Yes
2793	ARCO	Santa Barbara	4250	10/26/61	\$2,101,875.00	20 yrs +	Yes	Exploration	Likely	Yes	Yes
2199	Benton	Santa Barbara	3840	7/25/58	\$12,423,598.05	20 yrs +	Yes	Development	No	Yes	No
2894	Benton	Santa Barbara	4250	6/28/62	\$1,502,020.00	20 yrs +	Yes	Development	No	Yes	No
2920	Benton	Santa Barbara	4250	8/28/62	\$14,080,713.82	20 yrs +	Yes	Development	No	Yes	No
1824	Chevron	Santa Barbara	5500	1/10/57	\$7,250,606.95	20 yrs +	Yes	None	Likely	No	No
3150	Chevron	Santa Barbara	4012	7/28/64	\$18,666,555.66	20 yrs +	Yes	Exploration	No	No	No
3133	Exxon	Santa Barbara	5535	5/28/64	\$22,002,500.00	20 yrs +	Yes	Development	No	Yes	No
3499	Exxon	Santa Barbara	1340	6/15/66	\$335,000.00	20 yrs +	Yes	Exploration	Likely	No	No
2933	Phillips	Santa Barbara	4250	10/25/62	\$6,100,000.00	20 yrs +	Yes	Development	No	Yes	No
4000	POOL	Santa Barbara	204	8/28/68	\$361,408.00	20 yrs +	Yes	Development	No	Yes	No

LEASE	OPERATOR	COUNTY	ACREAGE	DATE ISSUED	BONUS \$	PRIMARY LEASE TERM	DUE DILIGENCE REQUIREMENTS	FUTURE POTENTIAL	ANTICIPATE Q/C	DEVELOPMENT FROM EXISTING FACILITIES	MORATORIUM STILL IN EFFECT
7911	POOI	Santa Barbara	1541	11/1/96	None	20 yrs +	Yes	Development	No	Yes	No
2206	Texaco	Santa Barbara	3840	7/25/58	\$23,711,538.24	20 yrs +	Yes	Exploration	Likely	Yes	No
2725	Texaco	Santa Barbara	4250	5/4/61	\$9,550,000.00	20 yrs +	Yes	Exploration	No	No	Yes
2726	Texaco	Santa Barbara	4250	5/4/61	\$1,355,111.00	20 yrs +	Yes	Exploration	Likely	Yes	Yes
2879	Unocal	Santa Barbara	5653	4/26/62	\$3,047,740.00	20 yrs +	Yes	Development	No	No	No
2991	Unocal	Santa Barbara	4250	2/28/63	\$267,000.00	20 yrs +	Yes	Exploration	No	No	Yes
3004	Unocal	Santa Barbara	3150	4/25/63	\$612,840.00	20 yrs +	Yes	Exploration	No	Yes	Yes
3503	Unocal	Santa Barbara	1660	6/28/66	\$1,320,760.00	20 yrs +	Yes	Exploration	No	Yes	Yes
129	Venoco	Santa Barbara	254	1/27/44	None	20 yrs +	Yes	Development	No	Yes	No
208	Venoco	Santa Barbara	1920	1/18/46	None	20 yrs +	Yes	Development	No	Yes	No
421	Venoco	Santa Barbara	68	10/22/49	None	20 yrs +	None	Development	No	Yes	No
3120	Venoco	Santa Barbara	3324	4/29/64	\$352,111.15	20 yrs +	Yes	Development	No	Yes	No
3242	Venoco	Santa Barbara	4290	4/8/65	\$3,667,111.00	20 yrs +	Yes	Development	No	Yes	No
735	Berry	Ventura	220	6/30/52	None	20 yrs +	None	Development	No	Yes	No
3314	Berry	Ventura	5430	7/2/65	\$3,299,685.00	20 yrs +	Yes	Development	No	Yes	No
427	Mobil	Ventura	148	5/19/50	None	10 yrs +	None	Development	No	Yes	No
145	RILP	Ventura	326	7/3/44	None	20 yrs +	None	Development	No	Yes	No
410	RILP	Ventura	50	4/17/49	None	10 yrs +	None	Development	No	Yes	No
429	RILP	Ventura	80	4/21/51	None	10 yrs +	None	Development	No	Yes	No
1466	RILP	Ventura	1175	8/29/55	None	20 yrs +	None	Development	No	Yes	No

RILP — Rincon Island Limited Partners  
CEQ — Continuing Economic Quantities  
POOI — Pacific Operators Offshore, Inc.

Note: For further explanation of column headings, see attachment.

**Shaded areas are currently oil producing leases.**

## **STATUS OF STATE OFFSHORE LEASES: Explanation of Headings**

**Acreage:** The current tide and submerged lands included in the state lease. The acreage, in most cases, determines the rental; rental is fixed at \$1.00 per acre.

**Date Issued:** The date of issuance of the present lease. Several of the older leases (pre-1955) were issued as extension and renewal of certain leases entered into pursuant to Chapter 303, Statutes of 1921.

**Bonus:** The bonus represents the cash payment received by the state, pursuant to competitive public bidding, as consideration for award of the lease. Leasing has also been conducted wherein the biddable factor was a factor to be applied to a specified scale of oil royalties (sliding scale).

**Primary Lease Term:** Leases are issued for a fixed primary term and for so long thereafter as oil or gas is produced in paying quantities, or the lessee is diligently conducting production, drilling, or other necessary lease or well maintenance operations on the leases lands.

**Due Diligence Requirements for State Leases:** The leases generally provide an initial drilling term within which time the lessee must initiate drilling operations. Most state leases provided for this term to be three years from the date of issuance of the lease. The lessee may start and stop drilling operations at any time within this period. Beyond this period the lessee has an obligation to continue drilling operations, with no more than 120 days between wells until the lease is fully developed. The drilling moratorium established by the State Lands Commission in 1969, provided for tolling of these obligations during the term of the moratorium.

**Future Potential:** Based on geological and engineering information available to the State Lands Commission's staff, "Development" represents leases with probable commercial oil and/or gas resources and "Exploration" represents leases which warrant further geophysical or exploratory drilling operations.

**Anticipated Q/C (Quitclaim):** The leases identified as "Likely" to be quitclaimed indicates that there is little likelihood the lease will be either returned to production by the present lessee or assigned to another operator for further development.

**Development from Existing Facilities:** Existing facilities include state and federal platforms or presently permitted onshore locations such as the consolidated facilities in Santa Barbara County.

**Moratorium Still in Effect:** On January 28, 1969, a Union Oil Company well located on Platform "A" in federal waters in the Santa Barbara Channel blew out. In response to the well blowout the State Lands Commission, on February 1, 1969, established a moratorium on all further development on state leases. Since December 1973, the moratorium has been lifted on a lease by lease basis following a detailed review of the proposed development program and completion of the CEQA review process.